



**US Army Corps  
of Engineers®**  
Engineer Research and  
Development Center

# **The Environmental Assessment and Management (TEAM) Guide: Mississippi Supplement**

Carolyn O'Rourke and Patricia A. Kemme

March 2006  
Revised March 2010



# **The Environmental Assessment and Management (TEAM) Guide: Mississippi Supplement**

Carolyn O'Rourke and Patricia A. Kemme

*Construction Engineering Research Laboratory  
U.S. Army Engineer Research and Development Center  
PO Box 9005  
Champaign, IL 61826-9005*

Final report

Approved for public release; distribution is unlimited.

Prepared for U.S. Army Corps of Engineers  
Washington, DC 20314-1000

**Abstract:** Environmental assessments help determine compliance with current environmental regulations. The U.S. Air Force, U.S. Army, Defense Logistics Agency (DLA), and Corps of Engineers (Civil Works) have adopted environmental compliance programs that identify compliance problems before they are cited as violations by the U.S. Environmental Protection Agency.

Since 1984, the U.S. Army Construction Engineering Research Laboratory, in cooperation with numerous Department of Defense (DOD) components, has developed environmental compliance assessment checklist manuals. The Environmental Assessment and Management (TEAM) Guide was developed for use by all DOD components. Currently there are five participating DOD components: the Air Force, Air National Guard, Army, Civil Works, and DLA. These agencies have agreed to share the development and maintenance of this Guide.

The Guide combines Code of Federal Regulations and management practices into a series of checklists that show legal requirements and the specific operations or items to review. TEAM Guide is supplemented by DOD component-specific manuals detailing DOD component regulations and policies. The Mississippi Supplement was developed to be used in conjunction with the TEAM Guide, using existing Mississippi state environmental legislation and regulations as well as suggested management practices.

**DISCLAIMER:** The contents of this report are not to be used for advertising, publication, or promotional purposes. Citation of trade names does not constitute an official endorsement or approval of the use of such commercial products. All product names and trademarks cited are the property of their respective owners. The findings of this report are not to be construed as an official Department of the Army position unless so designated by other authorized documents.

**DESTROY THIS REPORT WHEN NO LONGER NEEDED. DO NOT RETURN IT TO THE ORIGINATOR.**

## FOREWORD

This is ERDC/CERL SR-06-14. The report is based on the information available on Enflex federal and state regulations of February 2010.

The research was performed for AEC MIPR 0010005589, technical monitor Mark DItmore; ANG MIPR F9WFEV0028G001, technical monitor is Chuck Smith; AGB W45XMA00130245, technical monitor is Phil Dao; Army Reserve MIPR10CODCD201, technical monitor is Roc Tschirhart; Commerce MIPR 1301-09-SA00110, technical monitor is Greg Falzetta; USACE Fund account 96x3123, technical monitor is John Coho; DHS IAG HSHQDC-08-X-00456, technical monitor is Peter Wixted; DLA MIPR SP1001090, technical monitor is Pam Hillis; USPS MOA-05-CERL-01, technical monitor is Sharon Marsh; and, State Department IAG F3NF369350G002, technical monitor is Janice Smith.

The research was performed by the Business Processes Branch (CN-B), Installations Division (CN), of the U.S. Army Construction Engineering Research Laboratory (CERL). The CERL Principal Investigator is Carolyn O'Rourke. The CERL Researcher is Patricia Kemme. Ms. Michelle Hanson is Branch Chief, CN-B, and Mr. John Bandy is Division Chief, CN. Dr. Ilker Adiguzel is Director of CERL.

CERL is an element of the U.S. Army Engineer Research and Development Center (ERDC), U.S. Army Corps of Engineers. The Director of ERDC is Dr. James R. Houston, and the Commander is COL Gary Johnson.



## **NOTICE**

This manual is intended as general guidance for personnel at Department of Defense (DOD) installations/CW facilities. It is not, nor is it intended to be, a complete treatise on environmental laws and regulations. Neither the U.S. Government nor any agency thereof, nor any of their employees, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information contained herein. For any specific questions about, or interpretations of, the legal references herein, consult appropriate legal counsel.





## ACRONYMS

ACGIH	American Conference of Governmental Industrial Hygienists
AQMA	air quality management area
ASTM	American Society for Testing and Materials
AWWA	American Water Works Association
BACT	best available control technology
BOD	biochemical oxygen demand
BTEX	benzene, toluene, ethylbenzene, xylene
CAR	control area responsible party
CAS	Chemical Abstract Service
CEM	continuous emission monitoring
CERCLA	<i>Comprehensive Environmental Response, Compensation, and Liability Act</i>
CFC	chlorofluorocarbons
CWA	<i>Clean Water Act</i>
dB	decibel
dBA	decibels using A-weighting network
dB(C)	decibels using C-weighting network
DEQ	Department of Environmental Quality
ESA	<i>Endangered Species Act</i>
FIFRA	<i>Federal Insecticide, Fungicide, and Rodenticide Act</i>
GVWR	gross vehicle weight rating
HEPA Filter	high efficiency particulate air filter
HWM	hazardous waste management
IARC	International Agency for Research on Cancer
ICRU	International Commission on Radiological Units and Measurements
IUPAC	International Union of Pure and Applied Chemistry
LAER	lowest achievable emission rate
Ldn	day-night airport noise level
Leq	equivalent noise level
LPG	Liquefied Petroleum Gas
MC	medium curing
MCL	maximum contaminant level
MFL	million fibers per liter
MSDS	material safety data sheet
MSW	municipal-type solid waste
MSWLF	municipal solid waste landfill
MWC	municipal waste combustor
NBS	National Bureau of Standards
NEPA	<i>National Environmental Policy Act</i>
NFPA	National Fire Protection Association
NHPA	<i>National Historic Preservation Act</i>
NPDES	National Pollutant Discharge Elimination System
NTNCWS	nontransient noncommunity water system
OSHA	Occupational Safety and Health Administration
PAH	polycyclic aromatic hydrocarbons
PCB	polychlorinated biphenyl
PEL	permissible exposure limit
POTW	publicly owned treatment works
PUC	Public Utility Commission of Oregon
RACT	reasonably available control technology
RC	rapid curing
RCRA	<i>Resource Conservation and Recovery Act</i>
RDF	refuse-derived fuel

## ACRONYMS

REL	recommended exposure level
RGF	recirculating gravel filter
RVP	Reid vapor pressure
SAE	Society of Automotive Engineers
SARA	<i>Superfund Amendments and Reauthorization Act</i>
SC	slow curing
SDWA	<i>Safe Drinking Water Act</i>
SIC	Standard Industrial Classification
SMCL	secondary maximum contaminant level
SPCC	spill prevention countermeasure and control
SPL	sound pressure level
SWDA	<i>Solid Waste Disposal Act</i>
TLV	threshold limit value
TNTC	too numerous to count
TPH	total petroleum hydrocarbons
TRI	toxic release inventory
TSCA	<i>Toxic Substance Control Act</i>
TSD	treatment, storage, and disposal
TSDF	treatment, storage, and disposal facility
TSP	total suspended particulate
TSS	total suspended solids
TTHM	total trihalomethane
UL	Underwriters Laboratory
UFC	Uniform Fire Code
USEPA	United States Environmental Protection Agency
UST	underground storage tank
VOC	volatile organic compound
VOL	volatile organic liquid
WPCF	Water Pollution Control Facilities

## COMMONLY USED ABBREVIATIONS

bbl	barrel	mg	milligram
Btu	British thermal unit	mi	mile
C	Celsius	min	minute
cfs	cubic feet per second	MJ	megajoule
cm	centimeter	mL	milliliter
cm <sup>2</sup>	square centimeter	mm	millimeter
dscf	dry standard cubic foot	mo	month
dscm	dry standard cubic meter	mrem	millirem
F	Fahrenheit	MW	megawatt
ft	foot	ng	nanogram
ft <sup>2</sup>	square feet	NTU	nephelometric turbidity unit
ft <sup>3</sup>	cubic feet	oz	ounce
g	gram	pCi	picoCurie
gal	gallon	ppm	part per million
gJ	gigajoule	ppmv	part per million by volume
gr	grain	ppmw	part per million by weight
h	hour	psi	pound per square inch
ha	hectare	psia	pounds per square inch absolute
hp	horsepower	psig	pounds per square inch gauge
in.	inch	qt	quart
J	Joule	s	second
kg	kilogram	scf	standard cubic foot
km	kilometer	scm	standard cubic meter
kPa	kilopascals	sdcf	standard dry cubic foot
L	liter	sdcm	standard dry cubic meter
lb	pound	TU	turbidity unit
m	meter	V	volt
m <sup>3</sup>	cubic meter	yd	yard
MBtu	million British thermal units	yd <sup>2</sup>	square yard
meq	milligram equivalent	yr	year
CO	carbon monoxide	NO <sub>2</sub>	nitrogen dioxide
CO <sub>2</sub>	carbon dioxide	NO <sub>x</sub>	nitrogen oxides
Hg	mercury	SO <sub>2</sub>	sulfur dioxide



## METRIC CONVERSION TABLE

The following conversion table may be used throughout this manual to make approximate conversions between U.S. units and metric units.

1 in.	=	2.54 cm or 25.4 mm
1 ft	=	0.3048 m
1 ft <sup>2</sup>	=	0.093 m <sup>2</sup>
1 ft <sup>3</sup>	=	0.028 m <sup>3</sup>
1 psi	=	6.895 kPa
1 lb	=	0.454 kg
1 mi	=	1.61 km
1 gal	=	3.78 L
Degree F	=	(Degree C + 17.78) x 1.8
Degree C	=	0.55 (Degree F - 32)
1 yd	=	0.9144 m
1 Btu	=	4.184 kJ
1 acre	=	4046.9 m <sup>2</sup>
1 acre	=	0.405 hectare



### **Comment Form**

**Comments and questions regarding the Mississippi Supplement can be addressed to:**

**Carolyn O'Rourke**  
**e-mail [carolyn.y.orourke@usace.army.mil](mailto:carolyn.y.orourke@usace.army.mil)**  
**phone 217-398-5553 or 1-800-USACERL**  
**fax 217-373-3430**

**Please include the following information with your comment:**

**User Name:**

**Affiliation (installation, command, etc.):**

**email:**

**Phone:**

**FAX:**

<b>Page #</b>	<b>Checklist item #</b>	<b>Line #</b>	<b>Comments</b>





## SECTION 1

### AIR EMISSIONS MANAGEMENT

#### Mississippi Supplement, March 2010

This section covers the state requirements for Air Emissions Management and is intended to supplement the TEAM Guide. Refer to the TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

#### Incorporation of Federal Regulations by Reference

- The Federal New Source Performance Standards promulgated by the U.S. Environmental Protection Agency in (or to be printed in) Title 40 of the Code of Federal Regulations (CFR) Part 60, and Consolidated Federal Air Rule provisions in 40 CFR 65, are incorporated herein and adopted by reference by the Commission as official regulations of the State of Mississippi (APC-S-1.6.3).
- The National Emission Standards for Hazardous Air Pollutants are promulgated by the U.S. Environmental Protection Agency in (or to be printed in) 40 CFR Part 61 pursuant to Section 112 of the Federal Clean Air Act, as amended. The National Emission Standards for Hazardous Air Pollutants for Source Categories are promulgated by the U.S. Environmental Protection Agency in (or to be printed in) 40 CFR Part 63 pursuant to Section 112 of the Federal Clean Air Act, as amended. All such regulations, contained in 40 CFR Parts 61 and 63, promulgated by the U.S. Environmental Protection Agency are incorporated herein and adopted by reference by the Commission as official regulations of the State of Mississippi (APC-S-1.8.1).
- The Federal permit regulations applicable to facilities affected by the requirements of Title IV of the Clean Air Act are promulgated by the U.S. Environmental Protection Agency in (or to be printed in) 40 CFR Parts 72 and 76. All such regulations promulgated by the U.S. Environmental Protection Agency are incorporated herein and adopted by reference by the Commission as official regulations of the State of Mississippi (APC-S-7).
- Regulations for Accidental Release Prevention and Risk Management Programs applicable to facilities affected by the requirements of Section 112(r) of the Federal Clean Air Act are those regulations promulgated by the United States Environmental Protection Agency in (or to be printed in) Part 68 of Title 40 of the CFR. All such regulations promulgated by the United States Environmental Protection Agency as of September 15, 2006 are incorporated herein and adopted by reference by the Mississippi Commission on Environmental Quality as official regulations of the State of Mississippi (APC-S-8.II.A) [Revised March 2008].

#### Definitions

- *Agricultural Waste* - vegetative agricultural materials such as nut and grain hulls and chaff (e.g., almond, walnut, peanut, rice, and wheat), bagasse, orchard pruning's, corn stalks, coffee bean hulls and grounds, and other vegetative waste materials generated as a result of agricultural operations (40 CFR 60.2875) [Added May 2003].
- *Air Cleaning Device* - any method, process, or equipment that removes, reduces, or renders less noxious air contaminants discharged into the atmosphere. This term is synonymous with air pollution control device. (Mississippi Department of Environmental Quality (MDEQ) Air Pollution Control (APC) Regulation S-1 Section 2 (MDEQ, APC-S-1.2)) [Citation Revised March 2007; Revised March 2010].
- *Air Contaminant* - particulate matter, dust, fumes, gas, mist, smoke, or vapor, or any combination thereof, produced by processes other than natural (MDEQ, APC-S-1.2).
- *Air Contamination* - the presence in the outdoor ambient air of one or more air contaminants that contribute to a condition of air pollution (MDEQ, APC-S-1.2).

- *Air Contamination Source* - any source, at, from, or by reason of which, there is emitted into the ambient air any air contaminant, regardless of who the person may be who owns or operates the building, premises, or other property in, at, or on which such source is located, or the facility, equipment, or other property by which the emission is caused or from which the emission comes (MDEQ, APC-S-1.2).
- *Air Contaminant Point Source* - any single-point emissions of any contaminants such as from an individual machine or combustion device (MDEQ, APC-S-1.2).
- *Air Curtain Incinerator* - an incinerator that operates by forcefully projecting a curtain of air across an open chamber or pit in which combustion occurs. Incinerators of this type can be constructed above or below ground and with or without refractory walls and floor (air curtain incinerators are not to be confused with conventional combustion devices with enclosed fireboxes and controlled air technology such as mass burn, modular, and fluidized bed combustors) (40 CFR 60.2875) [Added May 2003].
- *Air Pollution* - the presence in the outdoor ambient air of one or more air contaminants in quantities, or characteristic, and of a duration that are materially injurious or can be reasonably expected to become materially injurious to human, plant, or animal life or to property or which unreasonably interfere with enjoyment of life or use of property, throughout the state or throughout such area of the state as is affected thereby (MDEQ, APC-S-1.2).
- *[Air Pollution] Alert* - that concentration of pollutants at which first stage control actions are to begin. An Alert will be declared when any one of the following levels is reached at any monitoring site (MDEQ, APC-S-3.3):
  1. the SO<sub>2</sub> level is equal to or greater than 0.3 ppm (800 micrograms/m<sup>3</sup>) for a 24-h average
  2. the PM<sub>10</sub> level is equal to or greater than 350 micrograms/m<sup>3</sup> for a 24-h average
  3. the CO level is equal to or greater than 15 ppm (17 mg/m<sup>3</sup>) for an 8-h average
  4. the ozone (O<sub>3</sub>) level is equal to or greater than 0.2 ppm (400 micrograms/m<sup>3</sup>) for a 1-h average
  5. the NO<sub>2</sub> level is equal to or greater than 0.6 ppm (1130 micrograms/m<sup>3</sup>) for a 1-h average or 0.15 ppm (282 micrograms/m<sup>3</sup>) for a 24-h average
  6. in addition to the levels listed for the above pollutants, meteorological conditions are such that pollutant concentrations can be expected to remain at the above levels for 12 or more hours or increase, or in the case of ozone, the situation is likely to reoccur within the next 24 h unless control actions are taken.
- *[Air Pollution] Emergency* - the concentration of pollutants that indicates that air quality is continuing to degrade to a level that should never be reached and the most stringent control actions are necessary. An emergency will be declared when any one of the following levels is reached at any monitoring site (MDEQ, APC-S-3.3) [Revised May 2006]:
  1. the SO<sub>2</sub> level is equal to or greater than 0.8 ppm (2100 micrograms/m<sup>3</sup>) for a 24-h average
  2. the PM<sub>10</sub> level is equal to or greater than 500 micrograms/m<sup>3</sup> for a 24-h average
  3. the CO level is equal to or greater than 40 ppm (46 mg/m<sup>3</sup>) for an 8-h average
  4. the ozone (O<sub>3</sub>) level is equal to or greater than 0.45 ppm (1000 micrograms/m<sup>3</sup>) for a 1-h average
  5. the NO<sub>2</sub> level is equal to or greater than 1.6 ppm (3000 micrograms/m<sup>3</sup>) for a 1-h average
  6. in addition to the levels listed for the above pollutants, meteorological conditions are such that pollutant concentrations can be expected to remain at the above levels for 12 or more hours or increase, or in the case of ozone, the situation is likely to reoccur within the next 24 h unless control actions are taken.
- *[Air Pollution] Warning* - the concentration of pollutants that indicates that air quality is continuing to degrade and that additional control actions are necessary. A warning will be declared when any one of the following levels is reached at any monitoring site (MDEQ, APC-S-3.3) [Revised November 1996; Revised May 2006]:
  1. the SO<sub>2</sub> level is equal to or greater than 0.7 ppm (1600 micrograms/m<sup>3</sup>) for a 24-h average
  2. the PM<sub>10</sub> level is equal to or greater than 420 micrograms/m<sup>3</sup> for a 24-h average
  3. the CO level is equal to or greater than 30 ppm (34 mg/m<sup>3</sup>) for an 8-h average
  4. the ozone (O<sub>3</sub>) level is equal to or greater than 0.4 ppm (800 micrograms/m<sup>3</sup>) for a 1-h average

5. the NO<sub>2</sub> level is equal to or greater than 1.2 ppm (2260 micrograms/m<sup>3</sup>) for a 1-h average or 0.4 ppm (750 micrograms/m<sup>3</sup>) for a 24-h average
  6. in addition to the levels listed for the above pollutants, meteorological conditions are such that pollutant concentrations can be expected to remain at the above levels for 12 or more hours or increase, or in the case of ozone, the situation is likely to reoccur within the next 24 h unless control actions are taken.
- *Ambient Air* - the encompassing atmosphere existing in the matter of space and to which life of this earth is adapted; that portion of the atmosphere outside of buildings, stacks, and ducts (MDEQ, APC-S-1.2).
  - *Atmosphere* - the air that envelopes or surrounds the earth. Synonymous with ambient air (MDEQ, APC-S-1.2).
  - *Auxiliary Fuel* - natural gas, liquified petroleum gas, fuel oil, or diesel fuel (40 CFR 60.2875) [Added May 2003].
  - *Bag Leak Detection System* - an instrument that is capable of monitoring particulate matter loadings in the exhaust of a fabric filter (i.e., baghouse) in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other principle to monitor relative particulate matter loadings (40 CFR 60.2875) [Added May 2003].
  - *Batch HMIWI* - an HMIWI that is designed such that neither waste charging nor ash removal can occur during combustion (APC-S-1.12.2) [Added June 2000].
  - *Biologicals* - preparations made from living organisms and their products, including vaccines, cultures, etc., intended for use in diagnosing, immunizing, or treating humans or animals or in research pertaining thereto (APC-S-1.12.2) [Added June 2000].
  - *Blood Products* - any product derived from human blood, including but not limited to, blood plasma, platelets, red or white blood corpuscles, and other derived licensed products, such as interferon, etc. (APC-S-1.12.2) [Added June 2000].
  - *Body Fluids* - liquid emanating or derived from humans and limited to blood; dialysate; amniotic, cerebrospinal, synovial, pleural, peritoneal, and pericardial fluids; and semen and vaginal secretions (APC-S-1.12.2) [Added June 2000].
  - *Bypass Stack* - a device used for discharging combustion gases to avoid severe damage to the air pollution control device or other equipment (APC-S-1.12.2) [Added June 2000].
  - *Calendar Quarter* - three consecutive months (nonoverlapping) beginning on: January 1, April 1, July 1, or October 1 (40 CFR 60.2875) [Added May 2003].
  - *Calendar Year* - 365 consecutive days starting on January 1 and ending on December 31 (40 CFR 60.2875) [Added May 2003].
  - *Chemotherapeutic Waste* - waste material resulting from the production or use of antineoplastic agents used for the purpose of stopping or reversing the growth of malignant cells (APC-S-1.12.2) [Added June 2000].
  - *Clean Lumber* - wood or wood products that have been cut or shaped and include wet, air-dried, and kiln-dried wood products. Clean lumber does not include wood products that have been painted, pigment-stained, or pressure-treated by compounds such as chromate copper arsenate, pentachlorophenol, and creosote (40 CFR 60.2875) [Added May 2003].
  - *Co-fired Combustor* - a unit combusting hospital waste and/or medical/infectious waste with other fuels or wastes (e.g., coal, municipal solid waste) and subject to an enforceable requirement limiting the unit to

combusting a fuel feed stream, 10 percent or less of the weight of which is comprised, in aggregate, of hospital waste and medical/infectious waste as measured on a calendar quarter basis. For purposes of this definition, pathological waste, chemotherapeutic waste, and low-level radioactive waste are considered "other" wastes when calculating the percentage of hospital waste and medical/infectious waste combusted (40 CFR 60.51c).

- *Commercial And Industrial Solid Waste Incineration (CISWI) Unit* - any combustion device that combusts commercial and industrial waste, as defined in this subpart. The boundaries of a CISWI unit are defined as, but not limited to, the commercial or industrial solid waste fuel feed system, grate system, flue gas system, and bottom ash. The CISWI unit does not include air pollution control equipment or the stack. The CISWI unit boundary starts at the commercial and industrial solid waste hopper (if applicable) and extends through two areas (40 CFR 60.2875) [Added May 2003]:
  1. The combustion unit flue gas system, which ends immediately after the last combustion chamber.
  2. The combustion unit bottom ash system, which ends at the truck loading station or similar equipment that transfers the ash to final disposal. It includes all ash handling systems connected to the bottom ash handling system.
- *Commercial And Industrial Waste* - solid waste combusted in an enclosed device using controlled flame combustion without energy recovery that is a distinct operating unit of any commercial or industrial facility (including field-erected, modular, and custom built incineration units operating with starved or excess air), or solid waste combusted in an air curtain incinerator without energy recovery that is a distinct operating unit of any commercial or industrial facility (40 CFR 60.2875) [Added May 2003].
- *Commission* - the Mississippi Commission on Environmental Quality (MDEQ, APC-S-1.2).
- *Contained Gaseous Material* - gases that are in a container when that container is combusted.
- *Continuous HMIWI* - an HMIWI that is designed to allow waste charging and ash removal during combustion (APC-S-1.12.2) [Added June 2000].
- *Cyclonic Barrel Burner* - a combustion device for waste materials that is attached to a 55 gallon, open-head drum. The device consists of a lid, which fits onto and encloses the drum, and a blower that forces combustion air into the drum in a cyclonic manner to enhance the mixing of waste material and air (40 CFR 60.2875) [Added May 2003].
- *Deviation* - any instance in which an affected source subject to this subpart, or an owner or operator of such a source (40 CFR 60.2875) [Added May 2003]:
  1. Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation, operating limit, or operator qualification and accessibility requirements;
  2. Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
  3. Fails to meet any emission limitation, operating limit, or operator qualification and accessibility requirement in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.
- *Dioxins/Furans* - tetra-through octachlorinated dibenzo-p-dioxins and dibenzofurans (40 CFR 60.2875) [Added May 2003].
- *Dioxins/Furans* - the combined emissions of tetra- through octa-chlorinated dibenzo-para-dioxins and dibenzofurans, as measured by EPA Reference Method 23 (APC-S-1.12.2) [Added June 2000].
- *Discard* - for purposes of 40 CFR part 60, subpart DDDD, only, burned in an incineration unit without energy recovery (40 CFR 60.2875) [Added May 2003].

- *Drum Reclamation Unit* - a unit that burns residues out of drums (e.g., 55 gallon drums) so that the drums can be reused (40 CFR 60.2875) [Added May 2003].
- *Dry Scrubber* - an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gases in the HMIWI exhaust stream forming a dry powder material (APC-S-1.12.2) [Added June 2000].
- *Energy Recovery* - the process of recovering thermal energy from combustion for useful purposes such as steam generation or process heating (40 CFR 60.2875) [Added May 2003].
- *Fabric Filter* - an add-on air pollution control device used to capture particulate matter by filtering gas streams through filter media, also known as a baghouse (40 CFR 60.2875) [Added May 2003].
- *Fabric Filter or Baghouse* - an add-on air pollution control system that removes particulate matter (PM) and nonvaporous metals emissions by passing flue gas through filter bags (APC-S-1.12.2) [Added June 2000].
- *Federal Act* - the Federal Clean Air Act (CAA) as amended in 1990, and any subsequent amendments (MDEQ, APC-S-2.I.C) [Citation Revised May 2006].
- *Fly Ash* - particulate matter capable of being gasborne, airborne, or carried in the gas stream and consisting essentially of ash, fused ash, and/or unburned material (MDEQ, APC-S-1.2).
- *High-air Phase* - the stage of the batch operating cycle when the primary chamber reaches and maintains maximum operating temperatures (APC-S-1.12.2) [Added June 2000].
- *Hospital* - any facility which has an organized medical staff, maintains at least six inpatient beds, and where the primary function of the institution is to provide diagnostic and therapeutic patient services and continuous nursing care primarily to human inpatients who are not related and who stay on average in excess of 24 h per admission. This definition does not include facilities maintained for the sole purpose of providing nursing or convalescent care to human patients who generally are not acutely ill but who require continuing medical supervision (APC-S-1.12.2) [Added June 2000].
- *Hospital/Medical/Infectious Waste Incinerator or HMIWI or HMIWI Unit* - any device that combusts any amount of hospital waste and/or medical/infectious waste (APC-S-1.12.2) [Added June 2000].
- *Hospital/Medical/Infectious Waste Incinerator Operator or HMIWI Operator* - any person who operates, controls, or supervises the day-to-day operation of an HMIWI (APC-S-1.12.2) [Added June 2000].
- *Hospital Waste* - discards generated at a hospital, except unused items returned to the manufacturer. The definition of hospital waste does not include human corpses, remains, and anatomical parts that are intended for interment or cremation (APC-S-1.12.2) [Added June 2000].
- *Incinerator* - a combustion device specifically designed for the destruction by high temperature burning of solid, semisolid, liquid, or gaseous combustible wastes and from which the solid residues contain little or no combustibles (MDEQ, APC-S-1.2).
- *Infectious Agent* - any organism (such as a virus or bacteria) that is capable of being communicated by invasion and multiplication in body tissues and capable of causing disease or adverse health impacts in humans (APC-S-1.12.2) [Added June 2000].
- *Intermittent HMIWI* - an HMIWI that is designed to allow waste charging, but not ash removal, during combustion (APC-S-1.12.2) [Added June 2000].

- *Large HMIWI* - (APC-S-1.12.2) [Added June 2000]:
  1. except as provided in 2:
    - a. an HMIWI whose maximum design waste burning capacity is more than 500 lb/h
    - b. a continuous or intermittent HMIWI whose maximum charge rate is more than 500 lb/h
    - c. a batch HMIWI whose maximum charge rate is more than 4000 lb/day.
  2. the following are not large HMIWI:
    - a. a continuous or intermittent HMIWI whose maximum charge rate is less than or equal to 500 lb/h
    - b. a batch HMIWI whose maximum charge rate is less than or equal to 4000 lb/day.
- *Low-Level Radioactive Waste* - waste material which contains radioactive nuclides emitting primarily beta or gamma radiation, or both, in concentrations or quantities that exceed applicable Federal or State standards for unrestricted release. Low-level radioactive waste is not high-level radioactive waste, spent nuclear fuel, or by-product material as defined by the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)(2)) (40 CFR 60.2875) [Added May 2003].
- *Major Title V Source* - any major stationary source as determined in the "Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act", APC-S-6 (APC-S-2.I.C) [Added June 2000; Citation Revised May 2006].
- *Major Source* - any stationary source (or group of stationary sources that are located on one or more contiguous or adjacent properties and are under common control of the same person [or persons under common control]) belonging to a single major industrial grouping and described in the following (MDEQ, APC-S-6.I.A) [Revised November 1996]:
  1. a major source under Section 112 of the Federal Act:
    - a. for pollutants other than radionuclides, any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, in the aggregate, 10 tons/yr or more of any hazardous air pollutant which has been listed pursuant to Section 112(b) of the Federal Act, 25 tons/yr or more of any combination of hazardous air pollutants, or a lesser quantity as the Administrator may establish by rule (notwithstanding the preceding sentence, emissions from any oil or gas exploration or production well emissions from any oil or gas exploration or production well [with its associated equipment] and emissions from any pipeline compressor or pump station are not to be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources)
    - b. for radionuclides, what has been specified by the Administrator by rule.
  2. a major stationary source of air pollutants, as defined in Section 302 of the Federal Act, that directly emits or has the potential to emit, 100 tons/yr or more of any air pollutant (including any major source of fugitive emissions of any such pollutant, as determined by rule by the Administrator). The fugitive emissions of a stationary source are not to be considered in determining whether it is a major stationary source for the purposes of Section 302(j) of the Federal Act, unless the source belongs to one of the categories of stationary sources listed in Appendix 1-2.
  3. a major stationary source as defined in Part D of Title I of the Federal Act, including the following:
    - a. for ozone nonattainment areas, sources with the potential to emit 100 tons/yr [90.70 metric tons/yr] or more of volatile organic compounds (VOCs) or oxides of nitrogen in areas classified as "marginal" or "moderate," 50 tons/yr or more in areas classified as "serious," 25 tons/yr in areas classified as "severe," and 10 tons/yr in areas classified as "extreme"; (except that the references in this subsection (a) to 100, 50, 25, 10 tons/yr of NO<sub>x</sub> do not apply with respect to any source for which the Administrator has made a finding under Section 182(f)(1) or (2) of the Federal Act, that requirements under Section 182(f) of the Federal Act do not apply)
    - b. for ozone transport regions established pursuant to Section 184 of the Federal Act, sources with the potential to emit 50 tons/yr of VOCs
    - c. for CO nonattainment areas that are classified as "serious," and in which stationary sources contribute significantly to CO levels, sources with the potential to emit 50 tons/yr or more of CO

- d. for  $PM_{10}$  nonattainment areas classified as “serious,” sources with the potential to emit 70 tons/yr or more of  $PM_{10}$ .

For the purposes of defining major sources, a stationary source or group of stationary sources are considered part of a single industrial grouping if all of the pollutant emitting activities at such source or group of sources on contiguous or adjacent properties belong to the same Major Group (i.e., all have the same two-digit code) as described in the Standard Industrial Classification Manual, 1987.

- *Malfunction* - any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused, in part, by poor maintenance or careless operation are not malfunctions (40 CFR 60.2875) [Added May 2003].
- *Malfunction* - any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused, in part, by poor maintenance or careless operation are not malfunctions. During periods of malfunction the operator shall operate within established parameters as much as possible, and monitoring of all applicable operating parameters shall continue until all waste has been combusted or until the malfunction ceases, whichever comes first (APC-S-1.12.2) [Added June 2000].
- *Maximum Charge Rate* (APC-S-1.12.2) [Added June 2000]:
  - 1. for continuous and intermittent HMIWI, 110 percent of the lowest 3-h average charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limits
  - 2. for batch HMIWI, 110 percent of the lowest daily charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limits.
- *Maximum Design Waste Burning Capacity* (APC-S-1.12.2) [Added June 2000]:
  - 1. for intermittent and continuous HMIWI
$$C = P_v \times 15,000/8500$$
where,
$$C = \text{HMIWI capacity, lb/h}$$
$$P_v = \text{primary chamber volume, ft}^3$$
$$15,000 = \text{primary chamber heat release rate factor, Btu/ft}^3/\text{h}$$
$$8500 = \text{standard waste heating value, Btu/lb}$$
  - 2. for batch HMIWI
$$C = P_v \times 4.5/8$$
where,
$$C = \text{HMIWI capacity, lb/h}$$
$$P_v = \text{primary chamber volume, ft}^3$$
$$4.5 = \text{waste density, lb/ft}^3$$
$$8 = \text{typical hours of operation of a batch HMIWI, hours.}$$
- *Maximum Fabric Filter Inlet Temperature* - 110 percent of the lowest 3-h average temperature at the inlet to the fabric filter (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the dioxin/furan emission limit (APC-S-1.12.2) [Added June 2000].
- *Maximum Flue Gas Temperature* - 110 percent of the lowest 3-h average temperature at the outlet from the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the mercury (Hg) emission limit (APC-S-1.12.2) [Added June 2000].
- *Medical/Infectious Waste* - any waste generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals that is listed in paragraphs (1) through (7) of this definition. The definition of medical/infectious waste does not include hazardous waste identified or listed under the regulations in part 261 of this chapter; household waste, as

defined in Section 261.4(b)(1) of this chapter; ash from incineration of medical/infectious waste, once the incineration process has been completed; human corpses, remains, and anatomical parts that are intended for interment or cremation; and domestic sewage materials identified in Section 261.4(a)(1) of this chapter (APC-S-1.12.2) [Added June 2000]:

1. Cultures and stocks of infectious agents and associated biologicals, including: cultures from medical and pathological laboratories; cultures and stocks of infectious agents from research and industrial laboratories; wastes from the production of biologicals; discarded live and attenuated vaccines; and culture dishes and devices used to transfer, inoculate, and mix cultures.
  2. Human pathological waste, including tissues, organs, and body parts and body fluids that are removed during surgery or autopsy, or other medical procedures, and specimens of body fluids and their containers.
  3. Human blood and blood products including:
    - a. Liquid waste human blood
    - b. Products of blood
    - c. Items saturated and/or dripping with human blood
    - d. Items that were saturated and/or dripping with human blood that are now caked with dried human blood; including serum, plasma, and other blood components, and their containers, which were used or intended for use in either patient care, testing and laboratory analysis, or the development of pharmaceuticals. Intravenous bags are also included in this category.
  4. Sharps that have been used in animal or human patient care or treatment or in medical, research, or industrial laboratories, including hypodermic needles, syringes (with or without the attached needle), pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, and culture dishes (regardless of the presence of infectious agents). Also included are other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides and cover slips.
  5. Animal waste including contaminated animal carcasses, body parts, and bedding of animals that were known to have been exposed to infectious agents during research (including research in veterinary hospitals), production of biologicals, or testing of pharmaceuticals.
  6. Isolation wastes including biological waste and discarded materials contaminated with blood, excretions, exudates, or secretions from humans who are isolated to protect others from certain highly communicable diseases, or isolated animals known to be infected with highly communicable diseases.
  7. Unused sharps including the following unused, discarded sharps: hypodermic needles, suture needles, syringes, and scalpel blades.
- *Medium HMIWI* - (APC-S-1.12.2) [Added June 2000]:
    1. Except as provided in paragraph (2):
      - a. an HMIWI whose maximum design waste burning capacity is more than 200 lb/h but less than or equal to 500 lb/h
      - b. a continuous or intermittent HMIWI whose maximum charge rate is more than 200 lb/h but less than or equal to 500 lb/h
      - c. a batch HMIWI whose maximum charge rate is more than 1600 lb/day but less than or equal to 4000 lb/day.
    2. The following are not medium HMIWI:
      - a. a continuous or intermittent HMIWI whose maximum charge rate is less than or equal to 200 lb/h or more than 500 lb/h
      - b. a batch HMIWI whose maximum charge rate is more than 4000 lb/day or less than or equal to 1600 lb/day.
  - *Minimum Dioxin/Furan Sorbent Flow Rate* - 90 percent of the highest 3-h average dioxin/furan sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the dioxin/furan emission limit (APC-S-1.12.2) [Added June 2000].
  - *Minimum Hg Sorbent Flow Rate* - 90 percent of the highest 3-h average Hg sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the Hg emission limit (APC-S-1.12.2) [Added June 2000].



- *Minimum Hydrogen Chloride (HCl) Sorbent Flow Rate* - 90 percent of the highest 3-h average HCl sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the HCl emission limit (APC-S-1.12.2) [Added June 2000].
- *Minimum Horsepower or Amperage* - 90 percent of the highest 3-h average horsepower or amperage to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable emission limits (APC-S-1.12.2) [Added June 2000].
- *Minimum Pressure Drop Across the Wet Scrubber* - 90 percent of the highest 3-h average pressure drop across the wet scrubber PM control device (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the PM emission limit (APC-S-1.12.2) [Added June 2000].
- *Minimum Scrubber Liquor Flow Rate* - 90 percent of the highest 3-h average liquor flow rate at the inlet to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with all applicable emission limits (APC-S-1.12.2) [Added June 2000].
- *Minimum Scrubber Liquor pH* - 90 percent of the highest 3-h average liquor pH at the inlet to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance the HCl emission limit (APC-S-1.12.2) [Added June 2000].
- *Minimum Secondary Chamber Temperature* - 90 percent of the highest 3-h average secondary chamber temperature (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the PM, CO, or dioxin/furan emission limits (APC-S-1.12.2) [Added June 2000].
- *Moderate Modification* - any modification in which the source is making enforceable emissions reductions to avoid major source requirements of Commission Regulation APC-S-5, "Regulations for the Prevention of Significant Deterioration of Air Quality", or Section V.E. of these regulations (i.e., "netting" out of PSD/NSR). These modifications are often called "synthetic minor modifications" (APC-S-2.I.B) [Added June 2000; Revised May 2006].
- *Moderate Stationary Source* - Any new stationary source which makes enforceable emissions reductions to avoid major source requirements of Commission Regulation APC-S-5, "Regulations for the Prevention of Significant Deterioration of Air Quality" or Section V.E. of these regulations (i.e., "netting" out of PSD/NSR). (APC-S-2.I.C) [Added June 2000; Revised May 2006].
- *Modification or Modified CISWI Unit* - a CISWI unit you have changed later than June 1, 2001 and that meets one of two criteria (40 CFR 60.2875) [Added May 2003]:
  1. The cumulative cost of the changes over the life of the unit exceeds 50 percent of the original cost of building and installing the CISWI unit (not including the cost of land) updated to current costs (current dollars). To determine what systems are within the boundary of the CISWI unit used to calculate these costs, see the definition of CISWI unit.
  2. Any physical change in the CISWI unit or change in the method of operating it that increases the amount of any air pollutant emitted for which section 129 or section 111 of the Clean Air Act has established standards.
- *Modification or Modified HMIWI* - any change to an HMIWI unit after the effective date of these standards such that (40 CFR 60.51c):
  1. The cumulative costs of the modifications, over the life of the unit, exceed 50 per centum of the original cost of the construction and installation of the unit (not including the cost of any land purchased in connection with such construction or installation) updated to current costs, or

2. The change involves a physical change in or change in the method of operation of the unit which increases the amount of any air pollutant emitted by the unit for which standards have been established under section 129 or section 111.
- *Modification* - Any physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include (APC-S-2.I.C) [Added June 2000; Citation Revised May 2006]:
    1. routine maintenance, repair, and replacement;
    2. use of an alternative fuel or raw material by reason of an order under Sections 2 (a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
    3. use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;
    4. use of an alternative fuel or raw material by a stationary source which:
      - a. the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; or
      - b. the source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166;
    5. an increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR subpart I or 40 CFR 51.166; or
    6. any change in ownership of the stationary source.
  - *Modification* - any physical change in, or change in the method of operation of, an affected facility which increases the amount of any air pollutant emitted by such facility or which results in the emission of any air pollutant not previously emitted, except (MDEQ, APC-S-1.2):
    1. routine maintenance, repair, and replacement are not considered physical changes
    2. an increase in the production rate or hours of operation are not considered a change in the method of operation, unless it is prohibited by a permit.
  - *Multiple Chamber Incinerator* - any article, machine, equipment, contrivance, structure, or any part thereof used to dispose of combustible refuse by burning, that consists of three or more refractory walls, interconnected by gas passage points or ducts and employing adequate design parameters necessary for maximum combustion of the material to be burned (MDEQ, APC-S-1.2).
  - *Opacity* - the degree to which emissions reduce the transmission of light and obscure the background (MDEQ, APC-S-1.2).
  - *Open Burning* - the combustion of solid waste without the following (MDEQ, APC-S-1.2):
    1. control of combustion air to maintain adequate temperature for efficient combustion
    2. containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion
    3. control of the emission of the combustion products.
  - *Operating Day* - a 24-h period between 12:00 midnight and the following midnight during which any amount of hospital waste or medical/infectious waste is combusted at any time in the HMIWI (APC-S-1.12.2) [Added June 2000].
  - *Operation* - the period during which waste is combusted in the incinerator, excluding periods of startup or shutdown (APC-S-1.12.2) [Added June 2000].

- *Pathological Waste* - waste material consisting of only human or animal remains, anatomical parts, and/or tissue, the bags/containers used to collect and transport the waste material, and animal bedding (if applicable) (APC-S-1.12.2) [Added June 2000].
- *Part Reclamation Unit* - a unit that burns coatings off parts (e.g., tools, equipment) so that the parts can be reconditioned and reused (40 CFR 60.2875) [Added May 2003].
- *Particulate Matter* - total particulate matter emitted from CISWI units as measured by Method 5 or Method 29 of appendix A of this part (40 CFR 60.2875) [Added May 2003].
- *Particulate Matter* - any airborne, finely divided, solid or liquid material, with an aerodynamic diameter smaller than 100 micrometers (MDEQ, APC-S-1.2).
- *Particulate Matter Emissions* - all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by an applicable USEPA Test Method, an equivalent or alternative method specified by the USEPA, or by a test method specified in the approved State Implementation Plan (MDEQ, APC-S-1.2).
- *Pathological Waste* - waste material consisting of only human or animal remains, anatomical parts, and/or tissue, the bags/containers used to collect and transport the waste material, and animal bedding (if applicable) (40 CFR 60.2875) [Added May 2003].
- *PM<sub>2.5</sub> Emissions* - particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by a reference method based on Appendix L of 40 CFR 50 and designated in accordance with 40 CFR 53 or by an equivalent method designated in accordance with 40 CFR Part 53 (MDEQ, APC-S-1.2) [Added March 2010].
- *PM<sub>2.5</sub> Emissions* - finely divided solid or liquid material, with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers, emitted to the ambient air as measured by an applicable EPA Test Method, an equivalent or alternate method specified by the EPA, or by a test method specified in the approved State Implementation Plan (MDEQ, APC-S-1.2) [Added March 2010].
- *PM<sub>10</sub>* - particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method based on Appendix J of 40 CFR 50 and designated in accordance with 40 CFR 53 or by an equivalent method designated in accordance with 40 CFR Part 53 (MDEQ, APC-S-1.2).
- *PM<sub>10</sub> Emissions* - finely divided solid liquid material, with an aerodynamic diameter less than or equal to a nominal 10 micrometers, emitted to the ambient air as measured by an applicable USEPA Test Method, an equivalent or alternate method specified by the USEPA, or by a test method specified in the approved State Implementation Plan] (MDEQ, APC-S-1.2).
- *Primary Chamber* - the chamber in an HMIWI that receives waste material, in which the waste is ignited, and from which ash is removed (APC-S-1.12.2) [Added June 2000].
- *Process Weight* - the total weight of all materials introduced into a source operation including solid fuels and water. Excluded materials are as follows: liquids and gases used solely as fuels or as a means of conveyance, liquids used as a pollutant removal medium, recycled process materials counted at initial introduction, and air introduced for purposes of combustion (MDEQ, APC-S-1.2).
- *Pyrolysis* - the endothermic gasification of hospital waste and/or medical/infectious waste using external energy (APC-S-1.12.2) [Added June 2000].

- *Rack Reclamation Unit* - a unit that burns the coatings off racks used to hold small items for application of a coating. The unit burns the coating overspray off the rack so the rack can be reused (40 CFR 60.2875) [Added May 2003].
- *Reconstruction* - rebuilding a CISWI unit and meeting two criteria (40 CFR 60.2875) [Added May 2003]:
  1. The reconstruction begins on or after June 1, 2001.
  2. The cumulative cost of the construction over the life of the incineration unit exceeds 50 percent of the original cost of building and installing the CISWI unit (not including land) updated to current costs (current dollars). To determine what systems are within the boundary of the CISWI unit used to calculate these costs, see the definition of CISWI unit.
- *Recreational Area* -(MDEQ, APC-S-1.2):
  1. a national, state, county, or city designated park
  2. an outdoor recreational area, such as a golf course or swimming pool, owned by a city, county, or other public agency.
- *Refuse-Derived Fuel* - a type of municipal solid waste produced by processing municipal solid waste through shredding and size classification. This includes all classes of refuse-derived fuel including two fuels (40 CFR 60.2875) [Added May 2003]:
  1. Low-density fluff refuse-derived fuel through densified refuse-derived fuel.
  2. Pelletized refuse-derived fuel.
- *Regulated Air Pollutant* - Dust, fumes, mist, smoke, other particulate matter, vapor, gas, or any combination thereof subject to regulation under the Federal Act, or for which there is a duly adopted state ambient air quality standard (APC-S-2.I.C) [Added June 2000].
- *Residential Area* -(MDEQ, APC-S-1.2):
  1. a group of 20 or more single family dwelling units on contiguous property and having an average density of two or more units per acre
  2. a group of 40 or more single family dwelling units on contiguous property and having an average density of one or more units per acre
  3. a subdivision containing at least 20 constructed houses, in which the subdivision plat is recorded in the chancery clerk's office of the appropriate county.
- *Secondary Chamber* - a component of the HMIWI that receives combustion gases from the primary chamber and in which the combustion process is completed (APC-S-1.12.2) [Added June 2000].
- *Shutdown* –
  1. the period of time after all waste has been combusted in the primary chamber (40 CFR 60.2875) [Added May 2003].
  2. the period of time after all waste has been combusted in the primary chamber. For continuous HMIWI, shutdown shall commence no less than 2 hours after the last charge to the incinerator. For intermittent HMIWI, shutdown shall commence no less than 4 hours after the last charge to the incinerator. For batch HMIWI, shutdown shall commence no less than 5 hours after the high-air phase of combustion has been completed (APC-S-1.12.2) [Added May 2006].
- *Shutdown* - the termination of operation of equipment. Relative to fuel-burning equipment, a shutdown is to be construed to occur only when a unit is taken from a fired to a nonfired state (MDEQ, APC-S-1.2).
- *Significance Levels* - concentrations of pollutants against which air quality contributions of a facility are compared to determine whether the facility significantly impacts air quality in an area. The levels are as follows (APC –S-2.V.E.2) [Added November 1996; Citation Revised March 2007]:
 

SO<sub>2</sub>: 1.0 g/m<sup>3</sup>, annual average; 5 g/m<sup>3</sup>, 24-h average; 25 g/m<sup>3</sup>, 3-h average

PM<sub>10</sub>:1.0 g/m<sup>3</sup>, annual average; 5 g/m<sup>3</sup>, 24-h average  
NO<sub>2</sub>:1.0g/m<sup>3</sup>, annual average  
CO:0.5 mg/m<sup>3</sup>, 8-h average; 2.0 mg/m<sup>3</sup>, 1-h average.

- *Significant Minor Source* - A stationary source that is (a) not a synthetic minor source or major Title V source; and (b) is one of the following categories of sources (APC-S-2.I.C) [Added June 2000]:
  1. hot-mix asphalt plants,
  2. cotton gins,
  3. medical waste incinerators,
  4. rendering plants, or
  5. Any other new stationary source deemed by the Permit Board to be a significant minor source due to (i) the source's potential to require significant air pollution control operations in order to avoid a violation of the Mississippi Air and Water Pollution Control Law or any other regulation promulgated thereunder;
    - a. the source's potential to cause a substantial threat to public health, welfare, or the environment, or
    - b. the source's potential to cause or substantially contribute to a violation of any applicable ambient air quality standard.
- *Significant Impact* - air quality impact that exceeds the significance level (APC-S-2.V.E.2) [Added November 1996; Citation Revised March 2007].
- *Small HMIWI* - (APC-S-1.12.2) [Added June 2000]:
  1. Except as provided in paragraph (2):
    - a. an HMIWI whose maximum design waste burning capacity is less than or equal to 200 lb/h
    - b. a continuous or intermittent HMIWI whose maximum charge rate is less than or equal to 200 lb/h
    - c. a batch HMIWI whose maximum charge rate is less than 1600 lb/day.
  2. The following are not small HMIWI:
    - a. a continuous or intermittent HMIWI whose maximum charge rate is more than 200 lb/h
    - b. a batch HMIWI whose maximum charge rate is more than 1600 lb/day.
- *Smoke* - small gasborne particles resulting from incomplete combustion and consisting predominantly, but not exclusively, of carbon, ash, and other combustible material (MDEQ, APC-S-1.2).
- *Solid Waste* - any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1342), or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (42 U.S.C. 2014). For purposes of this subpart and subpart CCCC, only, solid waste does not include the waste burned in the fifteen types of units described in § 60.2555 (40 CFR 60.2875) [Added May 2003].
- *Soot* - aggregated particles consisting mainly of carbonaceous material (MDEQ, APC-S-1.2).
- *Standard Conditions* (when referring to units of measure) - a temperature of 68 degrees F (20 degrees C) and a pressure of 1 atmosphere (101.3 kilopascals) (40 CFR 60.2875) [Added May 2003].
- *Standard Conditions* - a temperature of 20 Degrees C and a pressure of 101.3 kPa (APC-S-1.12.2) [Added June 2000].
- *Startup* - the period of time between the activation of the system and the first charge to the unit. For batch HMIWI, startup means the period of time between activation of the system and ignition of the waste (APC-S-1.12.2) [Added June 2000].

- *Startup* - the bringing into operation from a nonoperative condition. Relative to fuel-burning equipment, a startup is construed to occur only when a unit is taken from a nonfired to a fired state (MDEQ, APC-S-1.2).
- *Startup Period* - the period of time between the activation of the system and the first charge to the unit (40 CFR 60.2875) [Added May 2003].
- *State Permit to Operate or State Operating Permit* - A permit issued under State Law to operate air emissions equipment at a significant minor source, exclusive of Title V Permits (APC-S-2.I.C) [Added June 2000; Citation Revised May 2006].
- *Stationary Source* - Each device or combination of devices at one physical location that emits a regulated air pollutant(s) (APC-S-2.I.C) [Added June 2000; Citation Revised May 2006].
- *Synthetic Minor Source* - any stationary source which would otherwise constitute a major source as defined by Commission Regulation APC-S-6, "Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act", except that the owner or operator of the stationary source elects for federally enforceable emissions limitations which may include permit conditions restricting hours of operation, or type or amount of material stored, combusted or processed, or establishing more stringent air pollution control efficiency requirements to lower allowable emissions for air pollutants in the State Permit to Operate below applicability thresholds for a Title V major source (APC-S-2.I.C) [Citation Revised March 2007].
- *Title V* - The air operating permit program mandated in Title V of the 1990 amendments to the federal Clean Air Act, codified in 42 U.S.C. § 7661 (APC-S-2.I.C) [Added June 2000; Citation Revised May 2006].
- *Title V Permit* - Any permit or group of permits covering a Title V source that is issued, renewed, amended, or revised pursuant to Commission Regulation APC-S-6 (APC-S-2.I.C) [Added June 2000; Citation Revised May 2006].
- *Title V Source* - Title V sources include the following (APC-S-2.I.C) [Added June 2000; Citation Revised May 2006]:
  1. any major source;
  2. any source, including an area source, subject to a standard, limitation or other requirement under Section 111 of the Federal Act;
  3. any source, including an area source, subject to a standard or other requirement under Section 112 of the Federal Act, except that a source is not required to obtain a permit solely because it is subject to regulations or requirements under Section 112(r) of the Federal Act;
  4. any affected source; and
  5. any source in a source category designated by the Administrator.
- *Total Reduced Sulfur (TRS)* - hydrogen sulfide, mercaptans, dimethyl sulfide, and any other organic sulfides present (MDEQ, APC-S-1.2).
- *Upset* - an unexpected and unplanned condition of operation of the facility in which equipment operates outside of the normal and planned parameters. An upset does not include a condition of operation caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, operator error, or an intentional startup or shutdown of equipment (MDEQ, APC-S-1.2).
- *Wet Scrubber* - an add-on air pollution control device that utilizes an aqueous or alkaline scrubbing liquor to collect particulate matter (including nonvaporous metals and condensed organics) and/or to absorb and neutralize acid gases (40 CFR 60.2875) [Added May 2003].

- *Wet Scrubber* - an add-on air pollution control device that utilizes an alkaline scrubbing liquor to collect particulate matter (including nonvaporous metals and condensed organics) and/or to absorb and neutralize acid gases (APC-S-1.12.2) [Added June 2000].
- *Wood Waste* - untreated wood and untreated wood products, including tree stumps (whole or chipped), trees, tree limbs (whole or chipped), bark, sawdust, chips, scraps, slabs, millings, and shavings. Wood waste does not include (40 CFR 60.2875) [Added May 2003]:
  1. Grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs from residential, commercial/retail, institutional, or industrial sources as part of maintaining yards or other private or public lands.
  2. Construction, renovation, or demolition wastes.
  3. Clean lumber.

**AIR EMISSIONS MANAGEMENT  
GUIDANCE FOR MISSISSIPPI CHECKLIST USERS**

**REFER TO CHECKLIST ITEMS:**

Missing Checklist Items	AE.2.1.MS.
State Specific Requirements	
Permits	AE.6.1.MS. through AE.6.4.MS.
Management/Administrative	AE.7.1.MS.
Emissions Limits	AE.9.1.MS. through AE.9.4.MS.
Miscellaneous Incinerators	AE.25.1.MS. through AE.25.29.MS.
Existing Commercial and Industrial Solid Waste Incinerators (CISWI)	AE.26.1.MS. through AE.26.23.MS.
Medical Waste Incinerators	
General	AE.30.1.MS. through AE.30.9.MS.
Monitoring	AE.32.1.MS. through AE.32.4.MS.
Reporting/Recordkeeping Requirements	AE.34.1.MS. through AE.34.4.MS.
Open Burning	AE.130.1.MS.

**AIR EMISSIONS MANAGEMENT  
GUIDANCE FOR MISSISSIPPI APPENDIX USERS**

**REFER TO APPENDIX NUMBERS:**

**REFER TO APPENDIX TITLES:**

1-1	Maximum Permissible Emission of Ash and/or Particulate Matter from Fossil Fuel Burning Sources
1-2	Categories of Stationary Sources to be Included in the Determination of Major Sources
1-3	Emission Limits for HMIWIs
1-4	Operating Parameters for HMIWIs To Be Monitored and Minimum Measurement and Recording Frequencies
1-5	Exclusions From Permit Requirements
1-6	Existing CISWI: Applicability and Exemptions
1-7	Existing CISWI: Emission Limitations
1-8	Existing CISWI: Operating Limits for Wet Scrubbers
1-9	Existing CISWI: Toxic Equivalency Factors
1-10	Existing CISWI: Summary of Reporting Requirements



<b>COMPLIANCE CATEGORY:</b> <b>AIR EMISSIONS MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>AE.2.</b>  <b>MISSING CHECKLIST ITEMS</b>  <b>AE.2.1.MS.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).	<p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p>

<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<b>STATE-SPECIFIC REQUIREMENT</b>  <b>AE.6. Permits/Notifications</b>  <b>AE.6.1.MS.</b> Air emissions equipment must have construction and operating permits (APC-S-2.I.D, S-2.XI, and S-2.XII) [Revised June 2000; Revised May 2006].  <b>AE.6.2.MS.</b> Air emissions equipment must meet certification requirements (APC-S-2.V.D) [Revised June 2000].  <b>AE.6.3.MS.</b> Sources must meet emission reduction schedules (APC-S-2.X.A) [Revised June 2000; Citation Revised May 2006].	<p>Verify that a permit to construct is obtained before starting construction of any new stationary sources.</p> <p>Verify that a permit to operate is obtained for the operation of any synthetic minor sources, major Title V sources, or significant minor sources.</p> <p>Verify that all air emissions equipment not exempted by the Commission meet permit requirements.</p> <p>(NOTE: The Permit Board may issue a multi-media permit incorporating a permit to construct air emissions equipment and/or a State Permit to Operate such equipment.)</p> <p>(NOTE: The Permit Board may issue general permits to construct and operate as described below to classes of articles, machines, equipment, or other contrivances. Submittal of a notice of intent (NOI) is required.)</p> <p>(NOTE: See Appendix 1-5 for a list of exclusions from permit requirements.)</p> <p>Verify that the Permit Board is notified of completion of construction of a state-approved stationary source.</p> <p>Verify that the Permit Board is notified in writing of any diversions from state-approved plans and specifications.</p> <p>Verify that each and every stationary source with actual emissions in excess of 0.25 tons per day of total air contaminants, and other significant sources, has a Commission-approved emissions reduction schedule which sets forth preplanned abatement strategies in the event of an emergency episode.</p> <p>Verify that the Commission-approved emissions reduction schedule is met for each of the sources to which it applies.</p>

<b>COMPLIANCE CATEGORY:</b> <b>AIR EMISSIONS MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>AE.6.4.MS.</b> Title V sources must obtain Title V permits (APC-S-6.I.B) [Revised May 2006].	<p>Determine whether there are any Title V sources (see Definitions) in operation.</p> <p>Verify that permits are obtained for all Title V sources.</p> <p>Verify that Title V sources meet permit requirements.</p> <p>(NOTE: The following source categories are exempted from the obligation to obtain a Title V permit:</p> <ul style="list-style-type: none"> <li>- all sources and source categories that would be required to obtain a Title V permit solely because they are subject to 40 CFR Part 60, subpart AAA - Standards of Performance for New Residential Wood Heaters</li> <li>- all sources and source categories that would be required to obtain a Title V permit solely because they are subject to 40 CFR Part 61, subpart M - National Emission Standard for Hazardous Air Pollutants for Asbestos § 61.145, Standard for Demolition and Renovation.)</li> </ul>

<b>COMPLIANCE CATEGORY:</b> <b>AIR EMISSIONS MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>STATE-SPECIFIC REQUIREMENTS</b>  <b>AE.7. Management/ Administrative</b>  <b>AE.7.1.MS.</b> Emission control action programs must be in place in case of air pollution emergency episodes (APC-S-3.4) [Revised May 2006].	<p>Determine whether any sources of air contaminants are operated that emit 0.25 tons/day or more of air contaminants for which air standards have been adopted.</p> <p>Verify that the facility has emission control action programs to reduce the emissions of air contaminants during air pollution alerts, air pollution warnings, and air pollution emergencies.</p> <p>Verify that the control action plans have been submitted to the Department.</p>

<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<b>STATE-SPECIFIC REQUIREMENTS</b>  <b>AE.9. Emissions Limits</b>  <b>AE.9.1.MS.</b> Facilities must meet specific requirements for ambient air (APC-S-4) [Revised May 2003; Revised May 2004].  <b>AE.9.2.MS.</b> Facilities must meet specific requirements for sources of particulate matter (APC-S-1.3) [Revised May 2004; Revised May 2006].	<p>Verify that the facility meet the requirements of the Primary and Secondary National Ambient Air Quality Standards (NAAQS) as established by the USEPA in 40 Code of Federal Regulations (CFR) Part 50, pursuant to the CAA, as amended.</p> <p>Verify that the facility does not emit odorous substances into the ambient air in levels of concentration that adversely and unreasonably:</p> <ul style="list-style-type: none"> <li>- affect human health and well-being</li> <li>- affect plant or animal life.</li> <li>- interfere with the use of enjoyment of property.</li> </ul> <p>Verify that point sources do not emit any smoke with an opacity greater than 40 percent from any manufacturing, industrial, commercial, or waste disposal program into the open air.</p> <p>(NOTE: Startup operations may produce darker emissions for up to 15 min per startup in any 1 h, and not to exceed 3 startups per stack in any 24-h period.)</p> <p>Verify that emissions resulting from soot blowing operations do not exceed an opacity greater than 60 percent.</p> <p>Verify that the aggregate duration of soot blowing operations does not exceed 10 min/Btu gross heating value of fuel in any 1 h during any 24-h period.</p> <p>Verify that no air contaminant is emitted with opacity greater than 40 percent.</p> <p>Verify that particles or contaminants are not emitted in sufficient amount or duration so as to be injurious to humans, animals, plants, or property, or to be a public nuisance, or create a condition of air pollution.</p> <p>Verify that no material is handled, transported, or stored in a manner that allows unnecessary [undefined] amounts of particulate matter to become airborne.</p> <p>Verify that the emission of ash and/or particulate matter from fossil fuel burning facilities does not exceed the limits listed in Appendix 1-1.</p> <p>Verify that combination boilers that use a mixture of combustibles, such as fossil</p>

<b>COMPLIANCE CATEGORY:</b> <b>AIR EMISSIONS MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>AE.9.3.MS.</b> Sulfur dioxide emission requirements must be met (APC-S-1.4) [Revised May 2004].</p>	<p>fuel plus bark, oil plus bark, spent wood, or water treatment byproducts sludge, do not emit 0.30 gr/sdcf or more.</p> <p>(NOTE: In the requirements for sources of sulfur compounds, <i>modification</i> means any physical change in an Air Contaminant Source that either increases the amount of any sulfur dioxide emitted by a source, or results in the emission of sulfur dioxide not previously emitted.)</p> <p>Verify that emissions of sulfur oxide do not exceed 4.8 lb/MBtu (measured as sulfur dioxide) heat input from any fuel burning facility in which the fuel is burned primarily to produce heat or power by indirect heat transfer.</p> <p>Verify that fuel burned in any fuel burning equipment does not result in an average emission of sulfur dioxide from any calendar year at a rate greater than was emitted by the same fuel burning equipment for the corresponding calendar year 1970, unless the equipment was under construction on 25 January 1972.</p> <p>Verify that sulfur dioxide discharges from any modified fuel burning equipment with a generation capacity less than 250 MBtu/h, in which the fuel is burned primarily to produce heat or power by indirect heat transfer, do not exceed 2.4 lb/MBtu heat input.</p> <p>Verify that process equipment in existence on January 25, 1972 does not emit gas containing sulfur oxide (measured as sulfur dioxide) in excess of 2000 ppm (volume) or in excess of 500 ppm (volume) from any process equipment constructed after January 25, 1972.</p> <p>Verify that there are no gas stream emissions containing hydrogen sulfide in excess of 1 gr/100 scf.</p> <p>Verify that one of the following standards for gas streams containing hydrogen sulfide in excess of 1 gr/100 scf from process equipment is met:</p> <ul style="list-style-type: none"> <li>- incinerates gas streams at 1600 Degrees F for a period of not less than 0.5 s</li> <li>- processes gas streams in an equally or more effective way for removing hydrogen sulfide.</li> </ul>
<p><b>AE.9.4.MS.</b> Sources of chemical emissions must meet specific requirements (APC-S-1.5).</p>	<p>Verify that fluoride emissions into the ambient air do not exceed 0.4 lb/ton of phosphorus pentoxide (P2O5) or the equivalent.</p> <p>Verify that toxic, noxious, deleterious substances, or regulated substances are not emitted into the ambient air in concentrations sufficient to affect human health and well-being, or unreasonably interfere with the enjoyment of property, or unreasonably and adversely affect plant or animal life beyond the boundaries of the</p>

<b>COMPLIANCE CATEGORY:</b> <b>AIR EMISSIONS MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
	property containing the air pollution source.

<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<b>AE.25.</b>  <b>MISCELLANEOUS INCINERATORS</b>  <b>AE.25.1.MS.</b> Facilities must meet specific requirement for incineration (APC-S-1.3.8) [Revised May 2004; Revised March 2010].	<p>Verify that the facility does not allow particulate matter emissions from any incinerator to exceed 0.2 gr/sdcf of flue gas calculated to 12 percent CO<sub>2</sub> by volume for products of combustion.</p> <p>(NOTE: This limitation applies when the incinerator is operating at the design capacity.)</p> <p>Verify that the facility does not allow particulate matter emissions to exceed 0.1 gr/sdcf of flue gas calculated to 12 percent CO<sub>2</sub> by volume for products of combustion when the incinerator is located in close proximity to a residential area.</p> <p>(NOTE: Start-up operations may produce emissions which exceed 40 percent opacity for up to 15 minutes per start-up in any one hour not to exceed 3 start-ups in any 24 hour period.)</p> <p>(NOTE: The particulate matter emissions does not apply to afterburners, flares, thermal oxidizers, and other similar devices used to reduce the emissions of air pollutants from processes.)</p>
<b>AE.25.2.MS.</b> [Added May 2003].	<p>(NOTE: Reserved for future use.)</p>
<b>AE.25.3.MS.</b> [Added May 2003].	<p>(NOTE: Reserved for future use.)</p>
<b>AE.25.4.MS.</b> [Added May 2003].	<p>(NOTE: Reserved for future use.)</p>
<b>AE.25.5.MS.</b> [Added May 2003].	<p>(NOTE: Reserved for future use.)</p>



<b>COMPLIANCE CATEGORY:</b> <b>AIR EMISSIONS MANAGEMENT</b> <b>Mississippi Supplement</b>		
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>	
<b>AE.25.6.MS.</b> [Added May 2003].	(NOTE: Reserved for future use.)	
<b>AE.25.7.MS.</b> [Moved May 2004].	(NOTE: Moved to AE.26.1. May, 2004)	
<b>AE.25.8.MS.</b> [Moved May 2004].	(NOTE: Moved to AE.26.2. May, 2004)	
<b>AE.25.9.MS.</b> [Moved May 2004].	(NOTE: Moved to AE.26.3. May, 2004)	
<b>AE.25.10.MS.</b> [Moved May 2004].	(NOTE: Moved to AE.26.4. May, 2004)	
<b>AE.25.11.MS.</b> [Moved May 2004].	(NOTE: Moved to AE.26.5. May, 2004)	
<b>AE.25.12.MS.</b> [Moved May 2004].	(NOTE: Moved to AE.26.6. May, 2004)	
<b>AE.25.13.MS.</b> [Moved May 2004].	(NOTE: Moved to AE.26.7. May, 2004)	
<b>AE.25.14.MS.</b> [Moved May 2004].	(NOTE: Moved to AE.26.8. May, 2004)	
<b>AE.25.15.MS.</b> [Moved May	(NOTE: Moved to AE.26.9. May, 2004)	

<b>COMPLIANCE CATEGORY:</b> <b>AIR EMISSIONS MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
2004].	
<b>AE.25.16.MS.</b> [Moved May 2004].	(NOTE: Moved to AE.26.10. May, 2004)
<b>AE.25.17.MS.</b> [Moved May 2004].	(NOTE: Moved to AE.26.11. May, 2004)
<b>AE.25.18.MS.</b> [Moved May 2004].	(NOTE: Moved to AE.26.12. May, 2004)
<b>AE.25.19.MS.</b> [Moved May 2004].	(NOTE: Moved to AE.26.13. May, 2004)
<b>AE.25.20.MS.</b> [Moved May 2004].	(NOTE: Moved to AE.26.14. May, 2004)
<b>AE.25.21.MS.</b> [Moved May 2004].	(NOTE: Moved to AE.26.15. May, 2004)
<b>AE.25.22.MS.</b> [Moved May 2004].	(NOTE: Moved to AE.26.16. May, 2004)
<b>AE.25.23.MS.</b> [Moved May 2004].	(NOTE: Moved to AE.26.17. May, 2004)
<b>AE.25.24.MS.</b> [Moved May 2004].	(NOTE: Moved to AE.26.18. May, 2004)

<b>COMPLIANCE CATEGORY:</b> <b>AIR EMISSIONS MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>AE.25.25.MS.</b> [Moved May 2004].	(NOTE: Moved to AE.26.19. May, 2004)
<b>AE.25.26.MS.</b> [Moved May 2004].	(NOTE: Moved to AE.26.20. May, 2004)
<b>AE.25.27.MS.</b> [Moved May 2004].	(NOTE: Moved to AE.26.21. May, 2004)
<b>AE.25.28.MS.</b> [Moved May 2004].	(NOTE: Moved to AE.26.22. May, 2004)
<b>AE.25.29.MS.</b> [Moved May 2004].	(NOTE: Moved to AE.26.23. May, 2004)

<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>AE.26.</b></p> <p><b>EXISTING COMMERCIAL AND INDUSTRIAL SOLID WASTE INCINERATORS (CISWI)</b></p> <p><b>AE.26.1.MS.</b> Existing commercial and solid waste incinerators (CISWI) must achieve compliance by specific deadlines (APC-S-1.13.3 and 40 CFR 60.2585 through 60.2605) [Added May 2003].</p>	<p>(NOTE: See Appendix 1-6 for applicability and exemptions.)</p> <p>Verify that each CISWI complies with the emission standards and requirements set forth in this subsection not later than December 1, 2003.</p> <p>Verify that any CISWI that does not comply with December 1, 2003 deadline meets the increments of progress requirements as follows:</p> <ul style="list-style-type: none"> <li>- increment 1: submit final control plan by April 1, 2003</li> <li>- increment 2: achieve final compliance by December 1, 2005.</li> </ul> <p>Verify that the notification of achievement of increments of progress includes:</p> <ul style="list-style-type: none"> <li>- notification that the increment of progress has been achieved</li> <li>- any items required to be submitted with each increment of progress</li> <li>- signature of the owner or operator of the CISWI unit.</li> </ul> <p>Verify that notifications for achieving increments of progress are postmarked no later than 10 business days after the compliance date for the increment.</p> <p>Verify that CISWIs that fail to meet an increment of progress submit a notification to the Administrator postmarked within 10 business days after the date for that increment of progress, informing the Administrator that the increment was not met, and continue to submit reports each subsequent calendar month until the increment of progress is met.</p> <p>Verify that the final control plan submitted to meet increment 1 includes these five items:</p> <ul style="list-style-type: none"> <li>- a description of the devices for air pollution control and process changes that will be used to comply with the emission limitations and other requirements of this subpart</li> <li>- the type(s) of waste to be burned</li> <li>- the maximum design waste burning capacity</li> <li>- the anticipated maximum charge rate</li> <li>- if applicable, the petition for site-specific operating limits.</li> </ul>

<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>AE.26.2.MS.</b> Existing commercial and solid waste incinerators (CISWI) must meet permitting requirements (APC-S-1.13) [Added May 2003].</p> <p><b>AE.26.3.MS.</b> Existing commercial and solid waste incinerators (CISWI) must develop and implement a waste management plan (APC-S-1.13.1 and 40 CFR 60.2620 through 60.2630) [Added May 2003].</p>	<p>Verify that the CISWI maintains an onsite copy of the final control plan.</p> <p>Verify that, for the final compliance increment of progress, the CISWI completes all process changes and retrofit construction of control devices, as specified in the final control plan, so that, if the affected CISWI unit is brought online, all necessary process changes and air pollution control devices would operate as designed.</p> <p>(NOTE: Moved from AE.25.7.ME., May, 2004)</p> <p>(NOTE: See Appendix 1-6 for applicability and exemptions.)</p> <p>Verify that each CISWI unit meets the permitting requirements of Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act, APC-S-6.</p> <p>Verify that the owner and/or operator of the CISWI submit the necessary permit application not later than April 1, 2003.</p> <p>Verify that after December 1, 2003, CISWIs only operate pursuant to authorization, or a permit issued, pursuant to the operating permit regulations.</p> <p>(NOTE: Moved from AE.25.8. May, 2004)</p> <p>(NOTE: See Appendix 1-6 for applicability and exemptions.)</p> <p>(NOTE: A waste management plan is a written plan that identifies both the feasibility and the methods used to reduce or separate certain components of solid waste from the waste stream in order to reduce or eliminate toxic emissions from incinerated waste.)</p> <p>Verify that CISWIs submit a waste management plan for review and approval no later than 1 April 2003.</p> <p>Verify that the waste management plan:</p> <ul style="list-style-type: none"> <li>- includes consideration of the reduction or separation of waste-stream elements such as paper, cardboard, plastics, glass, batteries, or metals, or the use of recyclable materials</li> <li>- identifies any additional waste management measures.</li> </ul> <p>Verify that the source implement those additional waste management measures considered practical and feasible, based on the effectiveness of waste management measures already in place, the costs of additional measures, the emissions</p>

<b>COMPLIANCE CATEGORY:</b> <b>AIR EMISSIONS MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>AE.26.4.MS.</b> Existing commercial and solid waste incinerators (CISWI) must meet operator training requirements (APC-S-1.13.1 and 40 CFR 60.2635 and 60.2665) [Added May 2003].</p>	<p>reductions expected to be achieved, and any other environmental or energy impacts they might have.</p> <p>(NOTE: Moved from AE.25.9. May, 2004)</p> <p>(NOTE: See Appendix 1-6 for applicability and exemptions.)</p> <p>Verify that no CISWI unit is operated unless a fully trained and qualified CISWI unit operator is accessible, either at the facility or can be at the facility within 1 hour.</p> <p>(NOTE: The trained and qualified CISWI unit operator may operate the CISWI unit directly or be the direct supervisor of one or more other plant personnel who operate the unit.)</p> <p>Verify that operator training and qualification are obtained through a State-approved program or by completing the requirements below.</p> <p>Verify that training is obtained by completing an incinerator operator training course that includes, at a minimum, the three elements described below:</p> <ul style="list-style-type: none"> <li>- training on the eleven subjects listed below: <ul style="list-style-type: none"> <li>- environmental concerns, including types of emissions</li> <li>- basic combustion principles, including products of combustion</li> <li>- operation of the specific type of incinerator to be used by the operator, including proper startup, waste charging, and shutdown procedures</li> <li>- combustion controls and monitoring</li> <li>- operation of air pollution control equipment and factors affecting performance (if applicable)</li> <li>- inspection and maintenance of the incinerator and air pollution control devices</li> <li>- actions to correct malfunctions or conditions that may lead to malfunction</li> <li>- bottom and fly ash characteristics and handling procedures</li> <li>- applicable Federal, State, and local regulations, including Occupational Safety and Health Administration workplace standards</li> <li>- pollution prevention</li> <li>- waste management practices</li> </ul> </li> <li>- an examination designed and administered by the instructor</li> <li>- written material covering the training course topics that can serve as reference material following completion of the course.</li> </ul> <p>Verify that, if all qualified operators are temporarily not accessible (i.e., not at the facility and not able to be at the facility within 1 hour), the CISWI meets one of the following requirements:</p>

<b>COMPLIANCE CATEGORY:</b> <b>AIR EMISSIONS MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>AE.26.5.MS.</b> Existing commercial and solid waste incinerators (CISWI) must meet maintain site-specific operational documentation (APC-S-1.13.1 and 40 CFR 60.2660) [Added May 2003].</p>	<ul style="list-style-type: none"> <li>- when all qualified operators are not accessible for more than 8 hours, but less than 2 weeks, the CISWI unit may be operated by other plant personnel familiar with the operation of the CISWI unit who have completed a review of the site-specific documentation (see AE.25.11.MS. below) within the past 12 months, if the CISWI records the period when all qualified operators were not accessible and include this deviation in the annual report, or</li> <li>- when all qualified operators are not accessible for 2 weeks or more, the CISWI: <ul style="list-style-type: none"> <li>- notifies the Administrator of this deviation in writing within 10 days, stating what caused this deviation, what the CISWI is doing to ensure that a qualified operator is accessible, and when the CISWI anticipates that a qualified operator will be accessible</li> <li>- submits a status report to the Administrator every 4 weeks outlining what the CISWI is doing to ensure that a qualified operator is accessible, stating when the CISWI anticipates that a qualified operator will be accessible and requesting approval from the Administrator to continue operation of the CISWI unit.</li> </ul> </li> </ul> <p>(NOTE: The CISWI will submit the first status report 4 weeks after notifying the Administrator of the absence of qualified operators. If the Administrator notifies the CISWI that the request to continue operation of the CISWI unit is disapproved, the CISWI unit may continue operation for 90 days, then must cease operation. Operation of the unit may resume when:</p> <ul style="list-style-type: none"> <li>- a qualified operator is accessible</li> <li>- the CISWI notifies the Administrator that a qualified operator is accessible and that it is resuming operation.)</li> </ul> <p>(NOTE: Moved from AE.25.10. May, 2004)</p> <p>(NOTE: See Appendix 1-6 for applicability and exemptions.)</p> <p>Verify that documentation is available at the facility and readily accessible for all CISWI unit operators that addresses the ten topics described:</p> <ul style="list-style-type: none"> <li>- summary of the applicable standards under this subpart</li> <li>- procedures for receiving, handling, and charging waste</li> <li>- incinerator startup, shutdown, and malfunction procedures</li> <li>- procedures for maintaining proper combustion air supply levels</li> <li>- procedures for operating the incinerator and associated air pollution control systems within the standards established under this subpart</li> <li>- monitoring procedures for demonstrating compliance with the incinerator operating limits</li> <li>- reporting and recordkeeping procedures</li> <li>- the waste management plan</li> <li>- procedures for handling ash</li> <li>- a list of the wastes burned during the performance test.</li> </ul>

<b>COMPLIANCE CATEGORY:</b> <b>AIR EMISSIONS MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>AE.26.6.MS.</b> Existing commercial and solid waste incinerators (CISWI) must meet specific emission limitations (APC-S-1.13.1 and 40 CFR 60.2670 and 60.2685) [Added May 2003].</p>	<p>Verify that this information and the training records required below are maintained in a manner that they can be readily accessed and are suitable for inspection upon request.</p> <p>Verify that the CISWI has a program for reviewing the information above with each incinerator operator.</p> <p>Verify that the initial review of the information is conducted by the later of the following three dates:</p> <ul style="list-style-type: none"> <li>- December 1, 2005</li> <li>- six months after CISWI unit startup</li> <li>- six months after being assigned to operate the CISWI unit.</li> </ul> <p>Verify that subsequent annual reviews of the information is conducted no later than 12 months following the previous review.</p> <p>Verify that the CISWI also maintains the following information:</p> <ul style="list-style-type: none"> <li>- records showing the names of CISWI unit operators who have completed review of the information, including the date of the initial review and all subsequent annual reviews</li> <li>- records showing the names of the CISWI operators who have completed the operator training requirements, met the criteria for qualification, and maintained or renewed their qualification</li> </ul> <p>for each qualified operator, the phone and/or pager number at which they can be reached during operating hours.</p> <p>Verify that operator records include documentation of training, the dates of the initial refresher training, and the dates of their qualification and all subsequent renewals of such qualifications.</p> <p>(NOTE: Moved from AE.25.11. May, 2004)</p> <p>Verify that the CISWI meets the emission limitations specified in Appendix 1-7 on the date the initial performance test is required or completed (whichever is earlier).</p> <p>(NOTE: The emission limitations and operating limits apply at all times except during CISWI unit startups, shutdowns, or malfunctions. Each malfunction must last no longer than 3 hours.)</p> <p>(NOTE: Moved from AE.25.12. May, 2004.)</p>



<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>AE.26.7.MS.</b> Existing commercial and solid waste incinerators (CISWI) using wet scrubbers to meet emission limitations must establish operating parameters (APC-S-1.13.1 and 40 CFR 60.2675(a) and (b), and 60.2685) [Added May 2003].</p>	<p>(NOTE: See Appendix 1-6 for applicability and exemptions.)</p> <p>Verify that if the CISWI uses a wet scrubber to comply with the emission limitations, it establishes operating limits for four operating parameters (as specified in Appendix 1-8), as follows, during the initial performance test:</p> <ul style="list-style-type: none"> <li>- maximum charge rate, calculated using one of these two different procedures, as appropriate: <ul style="list-style-type: none"> <li>- for continuous and intermittent units, maximum charge rate is 110 percent of the average charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limitations</li> <li>- for batch units, maximum charge rate is 110 percent of the daily charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limitations</li> </ul> </li> <li>- minimum pressure drop across the wet scrubber, which is calculated as 90 percent of the average pressure drop across the wet scrubber measured during the most recent performance test demonstrating compliance with the particulate matter emission limitations; or minimum amperage to the wet scrubber, which is calculated as 90 percent of the average amperage to the wet scrubber measured during the most recent performance test demonstrating compliance with the particulate matter emission limitations</li> <li>- minimum scrubber liquor flow rate, which is calculated as 90 percent of the average liquor flow rate at the inlet to the wet scrubber measured during the most recent performance test demonstrating compliance with all applicable emission limitations</li> <li>- minimum scrubber liquor pH, which is calculated as 90 percent of the average liquor pH at the inlet to the wet scrubber measured during the most recent performance test demonstrating compliance with the HCl emission limitation.</li> </ul> <p>Verify that the CISWI meets the operating limits established during the initial performance test on the date the initial performance test is required or completed (whichever is earlier).</p> <p>(NOTE: The emission limitations and operating limits apply at all times except during CISWI unit startups, shutdowns, or malfunctions. Each malfunction must last no longer than 3 hours.)</p> <p>(NOTE: Moved from AE.25.13. May, 2004)</p>
<p><b>AE.26.8.MS.</b> Existing commercial and solid waste incinerators (CISWI) using</p>	<p>(NOTE: See Appendix 1-6 for applicability and exemptions.)</p> <p>Verify that, if the CISWI uses a fabric filter to comply with the emission</p>

<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p>fabric filters to meet emission limitations must meet specific operating requirements (APC-S-1.13.1 and 40 CFR 60.2675(c) and 60.2685) [Added May 2003].</p> <p><b>AE.26.9.MS.</b> Existing commercial and solid waste incinerators (CISWI) that do not use fabric filters to meet emission limitations must meet petition the Executive Director for approval (APC-S-1.13.1 and 40 CFR 60.2680) [Added May 2003].</p>	<p>limitations, the CISWI operates each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month period.</p> <p>(NOTE: In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm is counted as a minimum of 1 hour. If it takes longer than 1 hour to initiate corrective action, the alarm time is counted as the actual amount of time taken by you to initiate corrective action.)</p> <p>(NOTE: The emission limitations and operating limits apply at all times except during CISWI unit startups, shutdowns, or malfunctions. Each malfunction must last no longer than 3 hours.)</p> <p>(NOTE: Moved from AE.25.14. May, 2004)</p> <p>(NOTE: See Appendix 1-6 for applicability and exemptions.)</p> <p>Verify that if the CISWI uses an air pollution control device other than a wet scrubber, or limits emissions in some other manner, to comply with the emission limitations of Appendix 1-7, the CISWI petitions the Administrator for specific operating limits to be established during the initial performance test and continuously monitored thereafter.</p> <p>Verify that the CISWI does not conduct the initial performance test until after the petition has been approved by the Administrator.</p> <p>Verify that the petition include:</p> <ul style="list-style-type: none"> <li>- identification of the specific parameters proposed to be used as additional operating limits</li> <li>- a discussion of the relationship between these parameters and emissions of regulated pollutants, identifying how emissions of regulated pollutants change with changes in these parameters, and how limits on these parameters will serve to limit emissions of regulated pollutants</li> <li>- a discussion of how the CISWI will establish the upper and/or lower values for these parameters which will establish the operating limits on these parameters</li> <li>- a discussion identifying the methods to be used to measure and the instruments to be used to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments</li> <li>- a discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.</li> </ul> <p>(NOTE: Moved from AE.25.15. May, 2004)</p>

<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>AE.26.10.MS.</b> Existing commercial and solid waste incinerators (CISWI) must conduct initial compliance testing (APC-S-1.13.1 and 40 CFR 60.2700 and 60.2705) [Added May 2003].</p>	<p>(NOTE: See Appendix 1-6 for applicability and exemptions.)</p> <p>Verify that the CISWI conduct an initial performance test to determine compliance with the emission limitations in Appendix 1-7 and to establish operating limits.</p> <p>Verify that the initial performance test is conducted no later than 180 days after the CISWI's final compliance date.</p> <p>(NOTE: Moved from AE.25.16. May, 2004)</p>
<p><b>AE.26.11.MS.</b> Existing commercial and solid waste incinerators (CISWI) must demonstrate continuous compliance with emission limitations and operating limits (APC-S-1.13.1 and 40 CFR 60.2710 through 60.2725) [Added May 2003].</p>	<p>(NOTE: See Appendix 1-6 for applicability and exemptions.)</p> <p>Verify that the CISWI conducts an annual performance test for particulate matter, hydrogen chloride, and opacity for each CISWI unit to determine compliance with the emission limitations.</p> <p>Verify that the CISWI continuously monitors the operating parameters.</p> <p>(NOTE: Operation above the established maximum or below the established minimum operating limits constitutes a deviation from the established operating limits. Three-hour rolling average values are used to determine compliance (except for baghouse leak detection system alarms) unless a different averaging period is established. Operating limits do not apply during performance tests.)</p> <p>Verify that the CISWI only burns the same types of waste used to establish operating limits during the performance test.</p> <p>Verify that the CISWI conducts annual performance tests for particulate matter, hydrogen chloride, and opacity within 12 months following the initial performance test, and subsequent annual performance tests within 12 months following the previous one.</p> <p>(NOTE: CISWIs can test less often for a given pollutant if the CISWI has test data for at least 3 years, and all performance tests for the pollutant (particulate matter, hydrogen chloride, or opacity) over 3 consecutive years show that the CISWI complies with the emission limitation. In this case, the CISWI does not have to conduct a performance test for that pollutant for the next 2 years. The CISWI must conduct a performance test during the third year and no more than 36 months following the previous performance test. If the CISWI unit continues to meet the emission limitation for particulate matter, hydrogen chloride, or opacity, the CISWI may choose to conduct performance tests for these pollutants every third year, but each test must be within 36 months of the previous performance test. However, if a performance test shows a deviation from an emission limitation</p>

<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<b>AE.26.12.MS.</b> Existing commercial and solid waste incinerators (CISWI) must comply with monitoring requirements (APC-S-1.13.1 and 40 CFR 60.2730 and 60.2735) [Added May 2003].	<p>for particulate matter, hydrogen chloride, or opacity, the CISWI must conduct annual performance tests for that pollutant until all performance tests over a 3-year period show compliance.)</p> <p>(NOTE: CISWIs may conduct a repeat performance test at any time to establish new values for the operating limits. The Administrator may request a repeat performance test at any time.)</p> <p>Verify that the CISWI repeats the performance test if the feed stream is different than the feed streams used during any performance test used to demonstrate compliance.</p> <p>(NOTE: Moved from AE.25.17. May, 2004.)</p> <p>(NOTE: See Appendix 1-6 for applicability and exemptions.)</p> <p>Verify that if the CISWI is using a wet scrubber to comply with the emission limitation, the CISWI installs, calibrates (to manufacturers' specifications), maintains, and operates devices (or establishes methods) for monitoring the value of the operating parameters used to determine compliance with the operating limits listed in Appendix 1-8.</p> <p>Verify that these devices (or methods) measure and record the values for these operating parameters at the frequencies indicated in Appendix 1-8 at all times except during testing.</p> <p>Verify that if the CISWI uses a fabric filter, the CISWI installs, calibrates, maintains, and continuously operates a bag leak detection system as follows:</p> <ul style="list-style-type: none"> <li>- the CISWI installs and operates a bag leak detection system for each exhaust stack of the fabric filter</li> <li>- each bag leak detection system is installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations</li> <li>- the bag leak detection system is certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less</li> <li>- the bag leak detection system sensor provides output of relative or absolute particulate matter loadings</li> <li>- the bag leak detection system is equipped with a device to continuously record the output signal from the sensor</li> <li>- the bag leak detection system is equipped with an alarm system that will sound automatically when an increase in relative particulate matter emissions over a preset level is detected, and is located where it is easily heard by plant operating personnel</li> <li>- for positive pressure fabric filter systems, a bag leak detection system is</li> </ul>

<b>COMPLIANCE CATEGORY:</b> <b>AIR EMISSIONS MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>AE.26.13.MS.</b> Existing commercial and solid waste incinerators (CISWI) must meet recordkeeping requirements (APC-S-1.13.1 and 40 CFR 60.2740 and 60.2745) [Added May 2003].</p>	<p>installed in each baghouse compartment or cell</p> <ul style="list-style-type: none"> <li>- for negative pressure or induced air fabric filters, the bag leak detector is installed downstream of the fabric filter.</li> </ul> <p>(NOTE: Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.)</p> <p>Verify that if the CISWI is using something other than a wet scrubber to comply with the emission limitations, the CISWI installs, calibrates (to the manufacturers' specifications), maintains, and operates the equipment necessary to monitor compliance with the site-specific operating limits.</p> <p>Verify that, except for monitoring malfunctions, associated repairs, and required quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments of the monitoring system), the CISWI conducts all monitoring at all times the CISWI unit is operating.</p> <p>(NOTE: The CISWI may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or quality control activities for meeting the requirements of this subpart, including data averages and calculations.)</p> <p>(NOTE: Moved from AE.25.18. May, 2004)</p> <p>(NOTE: See Appendix 1-6 for applicability and exemptions.)</p> <p>Verify that the CISWI maintains these 13 items (as applicable) for a period of at least 5 years:</p> <ul style="list-style-type: none"> <li>- calendar date of each record</li> <li>- records of the following data: <ul style="list-style-type: none"> <li>- the CISWI unit charge dates, times, weights, and hourly charge rates</li> <li>- liquor flow rate to the wet scrubber inlet every 15 minutes of operation, as applicable</li> <li>- pressure drop across the wet scrubber system every 15 minutes of operation or amperage to the wet scrubber every 15 minutes of operation, as applicable</li> <li>- liquor pH as introduced to the wet scrubber every 15 minutes of operation, as applicable</li> <li>- for CISWI units that establish operating limits for controls other than wet scrubbers, data collected for all operating parameters used to determine compliance with the operating limits</li> <li>- if a fabric filter is used to comply with the emission limitations, a record of the date, time, and duration of each alarm and the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken, and a record of</li> </ul> </li> </ul>

<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>AE.26.14.MS.</b> Existing commercial and solid waste incinerators (CISWI) must meet reporting requirements (APC-S-1.13.1 and 40 CFR</p>	<p>the percent of operating time during each 6-month period that the alarm sounds</p> <ul style="list-style-type: none"> <li>- identification of calendar dates and times for which monitoring systems used to monitor operating limits were inoperative, inactive, malfunctioning, or out of control (except for downtime associated with zero and span and other routine calibration checks), along with an identification of the operating parameters not measured, the duration, reasons for not obtaining the data, and a description of corrective actions taken</li> <li>- identification of calendar dates, times, and durations of malfunctions, and a description of the malfunction and the corrective action taken</li> <li>- identification of calendar dates and times for which data show a deviation from the operating limits in Appendix 1-8, or a deviation from other established operating limits, with a description of the deviations, reasons for such deviations, and a description of corrective actions taken</li> <li>- the results of the initial, annual, and any subsequent performance tests conducted to determine compliance with the emission limits and/or to establish operating limits, as applicable</li> <li>- records showing the names of CISWI unit operators who have completed review of the documentation in AE.25.11.MS., including the date of the initial review and all subsequent annual reviews</li> <li>- records showing the names of the CISWI operators who have completed the operator training requirements, met the criteria for qualification, and maintained or renewed their qualification, including documentation of training, the dates of the initial and refresher training, and the dates of their qualification and all subsequent renewals of such qualifications</li> <li>- for each qualified operator, the phone and/or pager number at which they can be reached during operating hours</li> <li>- records of calibration of any monitoring devices</li> <li>- equipment vendor specifications and related operation and maintenance requirements for the incinerator, emission controls, and monitoring equipment</li> <li>- the documentation listed in AE.25.11.MS</li> <li>- on a daily basis, keep a log of the quantity of waste burned and the types of waste burned (always required).</li> </ul> <p>Verify that all records are available onsite in either paper copy or computer-readable format that can be printed upon request, unless an alternative format is approved by the Administrator.</p> <p>(NOTE: Moved from AE.25.19. May, 2004)</p> <p>(NOTE: See Appendix 1-6 for applicability and exemptions.)</p> <p>Verify that the CISWI submits reports as referenced in Appendix 1-10, and as provided in AE.25.21.MS. through AE.25.24.MS.</p>

<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p>60.2750) [Added May 2003].</p> <p><b>AE.26.15.MS.</b> Existing commercial and solid waste incinerators (CISWI) must submit reports of initial performance tests (APC-S-1.13.1 and 40 CFR 60.2760) [Added May 2003].</p> <p><b>AE.26.16.MS.</b> Existing commercial and solid waste incinerators (CISWI) must submit annual reports (APC-S-1.13.1 and 40 CFR 60.2765 and 60.2770) [Added May 2003].</p>	<p>(NOTE: Moved from AE.25.20. May, 2004)</p> <p>(NOTE: See Appendix 1-6 for applicability and exemptions.)</p> <p>Verify that the CISWI submits the information specified below no later than 60 days following the initial performance test:</p> <ul style="list-style-type: none"> <li>- the complete test report for the initial performance test results obtained</li> <li>- the values for the site-specific operating limits established</li> <li>- if using a fabric filter to comply with the emission limitations, documentation that a bag leak detection system has been installed and is being operated, calibrated, and maintained.</li> </ul> <p>Verify that all reports are signed by the facilities manager.</p> <p>(NOTE: Moved from AE.25.21. May, 2004)</p> <p>(NOTE: See Appendix 1-6 for applicability and exemptions.)</p> <p>Verify that CISWIs submit an annual report no later than 12 months following the submission of the initial performance test.</p> <p>Verify that subsequent annual reports are submitted no more than 12 months following the previous report.</p> <p>(NOTE: If the unit is subject to permitting requirements under title V of the Clean Air Act, it may be required by the permit to submit these reports more frequently.)</p> <p>Verify that the annual report includes these ten items:</p> <ul style="list-style-type: none"> <li>- company name and address</li> <li>- statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report</li> <li>- date of report and beginning and ending dates of the reporting period</li> <li>- the values for the operating limits established</li> <li>- if no deviation from any emission limitation or operating limit that applies to the CISWI has been reported, a statement that there was no deviation from the emission limitations or operating limits during the reporting period, and that no monitoring system used to determine compliance with the operating limits was inoperative, inactive, malfunctioning or out of control</li> <li>- the highest recorded 3-hour average and the lowest recorded 3-hour average, as applicable, for each operating parameter recorded for the calendar year being reported</li> <li>- information recorded on malfunctions and deviations for the calendar year</li> </ul>

<b>COMPLIANCE CATEGORY:</b> <b>AIR EMISSIONS MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>AE.26.17.MS.</b> Existing commercial and solid waste incinerators (CISWI) must submit reports whenever there is a deviation from operating limits (APC-S-1.13.1 and 40 CFR 60.2775 and 60.2780) [Added May 2003].</p>	<p>being reported</p> <ul style="list-style-type: none"> <li>- if a performance test was conducted during the reporting period, the results of that test</li> <li>- if the CISWI qualified for reduced performance testing, and did not conduct a performance test during the reporting period, a statement that the CISWI met the requirements of Section 60.2720(a) or (b), and, therefore, was not required to conduct a performance test during the reporting period</li> <li>- documentation of periods when all qualified CISWI unit operators were unavailable for more than 8 hours, but less than 2 weeks.</li> </ul> <p>(NOTE: If the CISWI has a deviation from the operating limits or the emission limitations, it must also submit deviation reports as specified in Sections 60.2775, 60.2780, and 60.2785 below.)</p> <p>(NOTE: Moved from AE.25.22. May, 2004)</p> <p>(NOTE: See Appendix 1-6 for applicability and exemptions.)</p> <p>Verify that the CISWI submits a deviation report:</p> <ul style="list-style-type: none"> <li>- if any recorded 3-hour average parameter level is above the maximum operating limit or below the minimum operating limit</li> <li>- if the bag leak detection system alarm sounds for more than 5 percent of the operating time for the 6-month reporting period</li> <li>- if a performance test was conducted that deviated from any emission limitation.</li> </ul> <p>Verify that the deviation report is submitted by August 1 of that year for data collected during the first half of the calendar year (January 1 to June 30), and by February 1 of the following year for data collected during the second half of the calendar year (July 1 to December 31).</p> <p>Verify that in each deviation report, for any pollutant or parameter that deviated from the emission limitations or operating limits specified in this subpart, includes:</p> <ul style="list-style-type: none"> <li>- the calendar dates and times the unit deviated from the emission limitations or operating limit requirements</li> <li>- the averaged and recorded data for those dates</li> <li>- duration and causes of each deviation from the emission limitations or operating limits and corrective actions taken</li> <li>- a copy of the operating limit monitoring data during each deviation and any test report that documents the emission levels</li> <li>- the dates, times, number, duration, and causes for monitoring downtime incidents (other than downtime associated with zero, span, and other routine calibration checks)</li> </ul>



<b>COMPLIANCE CATEGORY:</b> <b>AIR EMISSIONS MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>AE.26.18.MS.</b> Existing commercial and solid waste incinerators (CISWI) must submit reports whenever there is a deviation from the trained operator requirements (APC-S-1.13.1 and 40 CFR 60.2785) [Added May 2003].</p>	<ul style="list-style-type: none"> <li>- whether each deviation occurred during a period of startup, shutdown, or malfunction, or during another period.</li> </ul> <p>(NOTE: Moved from AE.25.23. May, 2004)</p> <p>(NOTE: See Appendix 1-6 for applicability and exemptions.)</p> <p>Verify that, if all qualified operators are not accessible for 2 weeks or more, the CISWI takes the following actions:</p> <ul style="list-style-type: none"> <li>- submits a notification of the deviation within 10 days that includes: <ul style="list-style-type: none"> <li>- a statement of what caused the deviation.</li> <li>- a description of measures taken to ensure that a qualified operator is accessible</li> <li>- the date when a qualified operator will be available</li> </ul> </li> <li>- submit a status report to the Administrator every 4 weeks that includes: <ul style="list-style-type: none"> <li>- a description of what you are doing to ensure that a qualified operator is accessible</li> <li>- the date when you anticipate that a qualified operator will be accessible</li> <li>- request approval from the Administrator to continue operation of the CISWI unit.</li> </ul> </li> </ul> <p>Verify that, if the unit was shut down by the Administrator due to a failure to provide an accessible qualified operator, the CISWI notifies the Administrator that it is resuming operation once a qualified operator is accessible.</p> <p>(NOTE: Moved from AE.25.7. May, 2004)</p>
<p><b>AE.26.19.MS.</b> Air curtain incinerators must meet compliance schedule requirements (APC-S-1.13.1 and 40 CFR 60.2810 through 60.2845) [Added May 2003].</p>	<p>(NOTE: See Appendix 1-6 for applicability and exemptions.)</p> <p>(NOTE: An air curtain incinerator operates by forcefully projecting a curtain of air across an open chamber or open pit in which combustion occurs. Incinerators of this type can be constructed above or below ground and with or without refractory walls and floor. (Air curtain incinerators are not to be confused with conventional combustion devices with enclosed fireboxes and controlled air technology such as mass burn, modular, and fluidized bed combustors.) Air curtain incinerators that burn only the materials listed below are only required to meet the requirements under "Air Curtain Incinerators" Sections 60.2810 through 60.2870; see AE.25.25.MS. through AE.25.29.MS.):</p> <ul style="list-style-type: none"> <li>- 100 percent wood waste</li> <li>- 100 percent clean lumber</li> <li>- 100 percent mixture of only wood waste, clean lumber, and/or yard waste.)</li> </ul>

<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>AE.26.20.MS.</b> Air curtain incinerators that are permanently closed prior to December 1, 2005, must submit a closure notification</p>	<p>(NOTE: See Appendix 1-6 for applicability and exemptions.)</p> <p>Verify that each air curtain incinerator complies with the emission standards and requirements set forth in this subsection not later than December 1, 2003.</p> <p>Verify that any air curtain incinerator that does not comply with December 1, 2003 deadline meets the increments of progress requirements as follows:</p> <ul style="list-style-type: none"> <li>- increment 1: submit final control plan by April 1, 2003</li> <li>- increment 2: achieve final compliance by December 1, 2005.</li> </ul> <p>Verify that the notification of achievement of increments of progress includes:</p> <ul style="list-style-type: none"> <li>- notification that the increment of progress has been achieved</li> <li>- any items required to be submitted with each increment of progress</li> <li>- signature of the owner or operator of the air curtain incinerator unit.</li> </ul> <p>Verify that notifications for achieving increments of progress are postmarked no later than 10 business days after the compliance date for the increment.</p> <p>Verify that air curtain incinerators that fail to meet an increment of progress submit a notification to the Administrator postmarked within 10 business days after the date for that increment of progress, informing the Administrator that the increment was not met, and continue to submit reports each subsequent calendar month until the increment of progress is met.</p> <p>Verify that the final control plan submitted to meet increment 1 includes a description of any devices for air pollution control and any process changes that will be used to comply with the emission limitations and other requirements.</p> <p>Verify that the air curtain incinerator maintains an onsite copy of the final control plan.</p> <p>Verify that, for the final compliance increment of progress, the air curtain incinerator completes all process changes and retrofit construction of control devices, as specified in the final control plan, so that, if the affected air curtain incinerator unit is brought online, all necessary process changes and air pollution control devices would operate as designed.</p> <p>(NOTE: Moved from AE.25.25. May, 2004.)</p> <p>(NOTE: See Appendix 1-6 for applicability and exemptions.)</p> <p>(NOTE: An air curtain incinerator operates by forcefully projecting a curtain of air across an open chamber or open pit in which combustion occurs. Incinerators of this type can be constructed above or below ground and with or without</p>



<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<b>AE.26.22.MS.</b> Air curtain incinerators must meet opacity monitoring requirements (APC-S-1.13.1 and 40 CFR 60.2865) [Added May 2003].	<p>(NOTE: See Appendix 1-6 for applicability and exemptions.)</p> <p>(NOTE: An air curtain incinerator operates by forcefully projecting a curtain of air across an open chamber or open pit in which combustion occurs. Incinerators of this type can be constructed above or below ground and with or without refractory walls and floor. (Air curtain incinerators are not to be confused with conventional combustion devices with enclosed fireboxes and controlled air technology such as mass burn, modular, and fluidized bed combustors.) Air curtain incinerators that burn only the materials listed below are only required to meet the requirements under "Air Curtain Incinerators" Sections 60.2810 through 60.2870; see AE.25.25.MS. through AE.25.29.MS.):</p> <ul style="list-style-type: none"> <li>- 100 percent wood waste</li> <li>- 100 percent clean lumber</li> <li>- 100 percent mixture of only wood waste, clean lumber, and/or yard waste.)</li> </ul> <p>Verify that air curtain incinerators use Method 9 of appendix A of 40 CFR 60, Subpart DDDD to determine compliance with the opacity limitation.</p> <p>Verify that air curtain incinerators conduct an initial test for opacity no later than 180 days after December 1, 2005.</p> <p>Verify that air curtain incinerators, after the initial test for opacity, conduct annual tests no more than 12 calendar months following the date of the previous test.</p> <p>(NOTE: Moved from AE.25.28. May, 2004.)</p>
<b>AE.26.23.MS.</b> Air curtain incinerators must meet recordkeeping and reporting requirements (APC-S-1.13.1 and 40 CFR 60.2870) [Added May 2003].	<p>(NOTE: See Appendix 1-6 for applicability and exemptions.)</p> <p>(NOTE: An air curtain incinerator operates by forcefully projecting a curtain of air across an open chamber or open pit in which combustion occurs. Incinerators of this type can be constructed above or below ground and with or without refractory walls and floor. (Air curtain incinerators are not to be confused with conventional combustion devices with enclosed fireboxes and controlled air technology such as mass burn, modular, and fluidized bed combustors.) Air curtain incinerators that burn only the materials listed below are only required to meet the requirements under "Air Curtain Incinerators" Sections 60.2810 through 60.2870; see AE.25.25.MS. through AE.25.29.MS.):</p> <ul style="list-style-type: none"> <li>- 100 percent wood waste</li> <li>- 100 percent clean lumber</li> <li>- 100 percent mixture of only wood waste, clean lumber, and/or yard waste.)</li> </ul> <p>Verify that air curtain incinerators keep records of results of all initial and annual opacity tests onsite in either paper copy or electronic format, unless the Administrator approves another format, for at least 5 years.</p> <p>Verify that air curtain incinerators make all records available for submittal to the</p>

<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
	<p>Administrator or for an inspector's onsite review.</p> <p>Verify that air curtain incinerators submit an initial report no later than 60 days following the initial opacity test that includes the following information:</p> <ul style="list-style-type: none"> <li>- the types of materials the operator plans to combust in the air curtain incinerator</li> <li>- the results (each 6-minute average) of the initial opacity tests.</li> </ul> <p>Verify that air curtain incinerators submit annual opacity test results within 12 months following the previous report.</p> <p>Verify that air curtain incinerators submit initial and annual opacity test reports as electronic or paper copy on or before the applicable submittal date and keep a copy onsite for a period of 5 years.</p> <p>(NOTE: Moved from AE.25.29. May, 2004.)</p>

<b>COMPLIANCE CATEGORY:</b> <b>AIR EMISSIONS MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>MEDICAL WASTE INCINERATORS</b>  <b>AE.30. General</b>  <b>AE.30.1.MS.</b> Facilities must meet Infectious waste incinerators that incinerate only wastes generated onsite must meet specific operating requirements (APC-S-1.6.4.a) [Revised May 2004].  <b>AE.30.2.MS.</b> Commercial infectious waste incinerators must meet specific operating requirements (APC-S-1.6.4.b).  <b>AE.30.3.MS.</b> Hospital/ medical/ infectious waste incinerators (HMIWIs) which started construction after 20 June 1996 must meet specific emissions limitations (APC-S-1.12.1 and 1.12.3) [Added June 2000; Revised May	<p>Verify that infectious waste incinerators, which incinerate only those wastes generated onsite and were installed after 9 December 1993, meet the following requirements:</p> <ul style="list-style-type: none"> <li>- daily records of the times of operation, quantity of wastes incinerated, temperature of the secondary chamber are maintained for at least 2 yr</li> <li>- the temperature of the secondary chamber is monitored continuously</li> <li>- only wastes generated onsite are incinerated</li> </ul> <p>(NOTE: Disposal of wastes from off-site cause the incinerator to be classified as a commercial incinerator and, therefore, subject to the requirements applicable to such units.)</p> <p>(NOTE: Commercial waste incinerators are those that incinerate wastes other than or in addition to wastes generated onsite.)</p> <p>Verify that commercial infectious waste incinerators installed or modified after 9 December 1993 meet the following requirements:</p> <ul style="list-style-type: none"> <li>- a manifest system, including a detailed description of the waste collection and transportation system is used</li> <li>- daily records of the times of operation, quantity of wastes incinerated, temperature of the secondary chamber are maintained for at least 2 yr</li> <li>- the temperature of the secondary chamber is monitored continuously</li> <li>- any more stringent requirements for emissions operating parameters, monitoring, and recordkeeping prescribed by the Permit Board in any permit are met.</li> </ul> <p>Verify that, on or after the date on which the initial performance test is completed or is required to be completed, whichever date comes first, the HMIWI does not discharge into the atmosphere:</p> <ul style="list-style-type: none"> <li>- from that HMIWI, any gases that contain stack emissions in excess of the limits presented in Appendix 1-3, Table 1, or Table 2 for small rural HMIWIs</li> <li>- from the stack of that HMIWI, any gases that exhibit greater than 10 percent</li> </ul>



<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p>scrubber followed by a fabric filter and a wet scrubber must comply with specific operating parameters (APC-S-1.12.7(d), (h), (i) and (j)) [Added June 2000; Revised May 2004].</p> <p><b>AE.30.5.MS.</b> Existing HMIWIs equipped with a dry scrubber followed by a fabric filter are required to meet additional operating parameters (APC-S-1.12.7(e) and (h)) [Added June 2000; Revised May 2004; Revised May 2006].</p>	<p>the parameters in Appendix 1-4:</p> <ul style="list-style-type: none"> <li>– a dry scrubber followed by a fabric filter</li> <li>– a wet scrubber</li> <li>– a dry scrubber followed by a fabric filter and a wet scrubber.</li> </ul> <p>(NOTE: Operating parameter limits do not apply during performance tests.)</p> <p>(NOTE: A facility may conduct a repeat performance test within 30 days of violation of applicable operating parameters to demonstrate that the facility is not in violation of the applicable emission limit.)</p> <p>Verify that, if the facility is using an air pollution control device other than a dry scrubber followed by a fabric filter, a wet scrubber, or a dry scrubber followed by a fabric filter and a wet scrubber, the facility petitions the Administrator for additional site-specific operating parameters to be established during the initial performance test and continuously monitored thereafter.</p> <p>(NOTE: The initial performance test cannot be conducted until after the petition has been approved by the Administrator.)</p> <p>(NOTE: A facility may conduct a repeat performance test at any time to establish new values for the operating parameters. The Department may request a repeat performance test at any time as well.)</p> <p>(NOTE: See applicability and exemptions notes in AE.30.3.MS.)</p> <p>(NOTE: See Appendix 1-4 for operating parameters.)</p> <p>Verify that the HMIWI is not operated in the following manner:</p> <ul style="list-style-type: none"> <li>- above the maximum charge rate and below the minimum secondary chamber temperature simultaneously (violation of the CO emission limit)</li> <li>- above the maximum fabric filter inlet temperature and below the minimum dioxin/furan sorbent flow rate simultaneously (violation of the dioxin/furan emission limit)</li> <li>- above the maximum charge rate and below the minimum HCl sorbent flow rate simultaneously (violation of the HCl emission limit)</li> <li>- above the maximum charge rate and below the minimum Hg sorbent flow rate simultaneously (violation of the Hg emission limit).</li> </ul> <p>Verify that the facility does not use the bypass stack except during startup, shutdown, or malfunction.</p> <p>(NOTE: A HMIWI may conduct a repeat performance test within 30 days of violation of applicable operating parameters to demonstrate that the facility is not</p>



<b>COMPLIANCE CATEGORY:</b> <b>AIR EMISSIONS MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>AE.30.6.MS.</b> Existing HMIWIs equipped with a wet scrubber are required to meet additional operating parameters (APC-S-1.12.7(f) and (h)) [Added June 2000; Revised May 2004].</p>	<p>in violation of the applicable emission limit.)</p> <p>(NOTE: See applicability and exemptions notes in AE.30.3.MS.)</p> <p>(NOTE: See Appendix 1-4 for operating parameters.)</p> <p>Verify that the HMIWI is not operated above the maximum charge rate and below the minimum pressure drop across the wet scrubber or below the minimum horsepower or amperage to the system simultaneously.</p> <p>Verify that the HMIWI is not operated above the maximum charge rate and below the minimum secondary chamber temperature simultaneously.</p> <p>Verify that the HMIWI is not operated above the maximum charge rate, below the minimum secondary chamber temperature, and below the minimum scrubber liquor flow rate simultaneously.</p> <p>Verify that the HMIWI is not operated above the maximum charge rate and below the minimum scrubber liquor pH simultaneously.</p> <p>Verify that the HMIWI is not operated above the maximum flue gas temperature and above the maximum charge rate simultaneously.</p> <p>Verify that the facility does not use the bypass stack except during startup, shutdown, or malfunction.</p> <p>(NOTE: A facility may conduct a repeat performance test within 30 days of violation of applicable operating parameters to demonstrate that the facility is not in violation of the applicable emission limit.)</p>
<p><b>AE.30.7.MS.</b> Existing HMIWIs equipped with a dry scrubber followed by a fabric filter and a wet scrubber are required to meet additional operating parameters (APC-S-1.12.7(g) and (h)) [Added June 2000; Revised May 2004].</p>	<p>(NOTE: See applicability and exemptions notes in AE.30.3.MS.)</p> <p>(NOTE: See Appendix 1-4 for operating parameters.)</p> <p>Verify that the HMIWI does not operate above the maximum charge rate and below the minimum secondary chamber temperature simultaneously.</p> <p>Verify that the HMIWI does not operate above the maximum fabric filter inlet temperature, above the maximum charge rate, and below the minimum dioxin/furan sorbent flow rate simultaneously.</p> <p>Verify that the HMIWI does not operate above the maximum charge rate and below the maximum scrubber liquor pH simultaneously.</p>

<b>COMPLIANCE CATEGORY:</b> <b>AIR EMISSIONS MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>AE.30.8.MS.</b> Existing HMIWIs operators are required to be trained, qualified and available (APC-S-1.12.4 (a) through (h) [Added June 2000; Revised May 2004].</p>	<p>Verify that the HMIWI does not operate above the maximum charge rate and below the minimum Hg sorbent flow rate simultaneously.</p> <p>Verify that the facility does not use the bypass stack except during startup, shutdown, or malfunction.</p> <p>(NOTE: A facility may conduct a repeat performance test within 30 days of violation of applicable operating parameters to demonstrate that the facility is not in violation of the applicable emission limit.)</p> <p>(NOTE: See applicability and exemptions notes in AE.30.3.MS.)</p> <p>Verify that a trained and qualified HMIWI operator is accessible, either at the facility or available within 1 h, at all times that the HMIWI is being operated.</p> <p>(NOTE: The trained and qualified HMIWI operator may operate the HMIWI directly or be the direct supervisor of one or more HMIWI operators.)</p> <p>Verify that HMIWI operators were trained at a state-approved program or by completing the following requirements:</p> <ul style="list-style-type: none"> <li>– 24 h of training on the following subjects: <ul style="list-style-type: none"> <li>– environmental concerns, including pathogen destruction and types of emissions</li> <li>– basic combustion principles, including products of combustion</li> <li>– operation of the type of incinerator to be used by the operator, including proper startup, waste charging, and shutdown procedures</li> <li>– combustion controls and monitoring</li> <li>– operation of air pollution control equipment and factors affecting performance (if applicable)</li> <li>– methods to monitor pollutants (continuous emission monitoring systems and monitoring of HMIWI and air pollution control device operating parameters) and equipment calibration procedures (where applicable)</li> <li>– inspection and maintenance of the HMIWI, air pollution control devices, and continuous emission monitoring systems</li> <li>– actions to correct malfunctions or conditions that may lead to malfunction</li> <li>– bottom and fly ash characteristics and handling procedures</li> <li>– applicable Federal, state, and local regulations</li> <li>– work safety procedures</li> <li>– pre-startup inspections</li> <li>– recordkeeping requirements</li> </ul> </li> <li>– an examination designed and administered by the instructor</li> <li>– reference material distributed to the attendees covering the course topics.</li> </ul>

<b>COMPLIANCE CATEGORY:</b> <b>AIR EMISSIONS MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>AE.30.9.MS.</b> Existing HMIWIs must prepare a waste management plan (APC-S-1.12.5) [Added June 2000; Revised May 2004].</p>	<p>Verify that HMIWI operators have obtained qualification by:</p> <ul style="list-style-type: none"> <li>– completion of a training course described above, and</li> <li>– either 6-mo experience as an HMIWI operator, 6-mo experience as a direct supervisor of an HMIWI operator, or completion of at least two burn cycles under the observation of two qualified HMIWI operators.</li> </ul> <p>Verify that HMIWI operators have maintained qualification by completing and passing an annual review or refresher course of at least 4 h covering, at a minimum, the following:</p> <ul style="list-style-type: none"> <li>– update of regulations</li> <li>– incinerator operation, including startup and shutdown procedures</li> <li>– inspection and maintenance</li> <li>– responses to malfunctions or conditions that may lead to malfunction</li> <li>– discussion of operating problems encountered by attendees.</li> </ul> <p>(NOTE: See applicability and exemptions notes in AE.30.3.MS.)</p> <p>Verify that the HMIWI has prepared a waste management plan.</p> <p>Verify that the waste management plan identifies both the feasibility and the approach to separate certain components of solid waste from the health care waste stream in order to reduce the amount of toxic emissions from incinerated waste.</p> <p>(NOTE: A waste management plan may include, but is not limited to:</p> <ul style="list-style-type: none"> <li>– elements such as: <ul style="list-style-type: none"> <li>– paper</li> <li>– cardboard</li> <li>– plastics</li> <li>– glass</li> <li>– battery</li> <li>– metal recycling</li> </ul> </li> <li>– purchasing recycled or recyclable products.)</li> </ul> <p>(NOTE: A waste management plan may include different goals or approaches for different areas or departments of the facility and need not include new waste management goals for every waste stream.)</p> <p>(NOTE: A waste management plan should identify, where possible, reasonably available additional waste management measures, taking into account the effectiveness of waste management measures already in place, the costs of additional measures, the emission reductions expected to be achieved, and any</p>

<b>COMPLIANCE CATEGORY:</b> <b>AIR EMISSIONS MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
	<p>other environmental or energy impacts they might have.)</p> <p>Verify that the American Hospital Association's publication entitled "An Ounce of Prevention: Waste Reduction Strategies for Health Care Facilities" was considered in the development of the waste management plan.</p>

<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<b>MEDICAL WASTE INCINERATORS</b>  <b>AE.32. Monitoring</b>  <b>AE.32.1.MS.</b> Existing HMIWIs must conduct performance testing in accordance with specific provisions to determine compliance with emission limits (APC-S-1.12.1 and 1.12.7(b)and (c)) [Added June 2000; Revised May 2004; Citation Revised May 2006].	<p>Verify that an initial performance test was conducted in accordance with the performance test requirements contained in 40 CFR 60.8.</p> <p>(NOTE: The use of the bypass stack during any performance test invalidates the performance test.)</p> <p>Verify that, following the date on which the initial performance test was completed or was required to be completed, whichever date comes first, the facility determines compliance with:</p> <ul style="list-style-type: none"> <li>– the opacity limit by conducting an annual performance test (no more than 12 mo following the previous performance test) using appropriate procedures and test methods</li> <li>– the PM, CO, and HCl emission limits by conducting an annual performance test (no more than 12 mo following the previous performance test) using appropriate procedures and test methods</li> </ul> <p>(NOTE: If all three performance tests over a 3-yr period indicate compliance with the emission limit for a pollutant (PM, CO, or HCl), the facility may forego a performance test for that pollutant for the subsequent 2 yr.)</p> <p>(NOTE: At a minimum, a performance test for PM, CO, and HCl shall be conducted every third year (no more than 36 mo following the previous performance test.) If a performance test conducted every third year indicates compliance with the emission limit for a pollutant (PM, CO, or HCl), the facility may forego a performance test for that pollutant for an additional 2 yr.)</p> <p>(NOTE: If any performance test indicates noncompliance with the respective emission limit, a performance test for that pollutant shall be conducted annually until all annual performance tests over a 3-yr period indicate compliance with the emission limit.)</p> <p>(NOTE: The requirements of this subsection apply to each individual hospital/medical/infectious waste incinerator (HMIWI) for which construction was commenced on or before 20 June 1996. These requirements do not apply to the following:</p> <ul style="list-style-type: none"> <li>– a combustor during periods when only pathological waste, low-level radioactive waste, and/or chemotherapeutic waste is burned, provided the owner or operator of the combustor:             <ul style="list-style-type: none"> <li>– notifies the Administrator of an exemption claim</li> </ul> </li> </ul>

<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>AE.32.2.MS.</b> Existing HMIWIs must install, calibrate, maintain, and operate monitoring devices or establish methods to monitor operating parameters at applicable frequencies at all times except during periods of startup and shutdown (APC-S-1.12.8(a) through (d)) [Added June 2000 Revised May 2004].</p>	<ul style="list-style-type: none"> <li>– keeps records on a calendar quarter basis of the periods of time when only pathological waste, low-level radioactive waste and/or chemotherapeutic waste is burned</li> <li>– any co-fired combustor if the owner or operator: <ul style="list-style-type: none"> <li>– notifies the Administrator of an exemption claim</li> <li>– provides an estimate of the relative amounts of hospital waste, medical/infectious waste, and other fuels and wastes to be combusted</li> <li>– keeps records on a calendar quarter basis of the weight of hospital waste and medical/infectious waste combusted, and the weight of all other fuels and wastes combusted at the co-fired combustor</li> </ul> </li> <li>– any combustor required to have a permit under section 3005 of the <i>Solid Waste Disposal Act</i> (SWDA)</li> <li>– any combustor which meets the applicability requirements under subpart Cb, Ea, or Eb of 40 CFR 60 (standards or guidelines for certain municipal waste combustors)</li> <li>– any pyrolysis unit (see definitions)</li> <li>– cement kilns firing hospital waste and/or medical/infectious waste</li> <li>– physical or operational changes made to an existing HMIWI solely for the purpose of complying with emission guidelines of this subsection are not considered a modification and do not result in an existing HMIWI becoming subject new source performance standards under APC-S-1.6.4 and 40 CFR 60, Subpart Ec.)</li> </ul> <p>(NOTE: See applicability and exemptions notes in AE.33.1.MS.)</p> <p>Verify that calibration of the monitoring devices is completed to manufacturer's specifications.</p> <p>Verify that, where a device is not installed, calibrated, maintained, and operated, a method has been established for monitoring the applicable operating parameters.</p> <p>Verify that the monitoring devices or methods used measure and record values for all operating parameters listed in Appendix 1-4 at the frequencies indicated at all times except during startup and shutdown.</p> <p>Verify that the facility is using (and appropriately calibrating, maintaining, and operating) a monitoring device or method to measure the use of the bypass stack including:</p> <ul style="list-style-type: none"> <li>– date</li> <li>– time</li> <li>– duration.</li> </ul> <p>Verify that, if site-specific operating parameters were developed by the Administrator, the facility is using the equipment necessary to monitor these</p>

<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>AE.32.3.MS.</b> Small rural HMIWIs must install, calibrate, maintain, and operate monitoring devices to monitor operating parameters at applicable frequencies (APC-S-1.12.8(e)) [Added June 2000; Revised May 2004].</p>	<p>parameters.</p> <p>Verify that the facility is obtaining monitoring data at all times during HMIWI operation, except during periods of:</p> <ul style="list-style-type: none"> <li>– monitoring equipment malfunction</li> <li>– calibration</li> <li>– repair.</li> </ul> <p>(NOTE: At a minimum, valid monitoring data must be obtained for 75 percent of the operating hours per day and for 90 percent of the operating days per calendar quarter that the HMIWI is combusting hospital waste and/or medical/infectious waste.)</p> <p>(NOTE: See applicability and exemptions notes in AE.33.1.MS.)</p> <p>(NOTE: These requirements apply to any small HMIWI subject to the emission limits in Table 2 of Appendix 1-3.)</p> <p>Verify that small rural HMIWIs install, calibrate (to manufacturers' specifications), maintain, and operate a device for measuring and recording the temperature of the secondary chamber on a continuous basis, the output of which is recorded, at a minimum, once every minute throughout operation.</p> <p>Verify that small rural HMIWIs install, calibrate (to manufacturers' specifications), maintain, and operate a device which automatically measures and records the date, time, and weight of each charge fed into the HMIWI.</p> <p>Verify that small HMIWIs obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, calibration, or repair.</p> <p>(NOTE: At a minimum, valid monitoring data will be obtained for 75 percent of the operating hour per day and for 90 percent of the operating hour per calendar quarter that the designated facility is combusting hospital waste and/or medical/infectious waste.)</p> <p>(NOTE: "Small rural HMIWIs" include any small HMIWIs located more than 50 miles from the boundary of the nearest Standard Metropolitan Statistical Area (SMSA) and which burns less than 2000 lb/week of hospital waste and medical/infectious waste. (The quantity limit does not apply during performance tests.)</p>
<p><b>AE.32.4.MS.</b> Small rural HMIWIs must comply with</p>	<p>(NOTE: See applicability and exemptions notes in AE.33.1.MS.)</p>

<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p>specific inspection guidelines (APC-S-1.12.6) [Added June 2000; Revised May 2004].</p>	<p>Verify that, no later than 15 September 2000 and annually thereafter (no more than 12 mo following the previous annual equipment inspection) an equipment inspection is performed where the small rural HMIWI:</p> <ul style="list-style-type: none"> <li>- inspects all burners, pilot assemblies, and pilot sensing devices for proper operation, and cleans pilot flame sensor, as necessary</li> <li>- ensures proper adjustment of primary and secondary chamber combustion air, and adjust as necessary</li> <li>- inspects hinges and door latches, and lubricates as necessary</li> <li>- inspects dampers, fans, and blowers for proper operation</li> <li>- inspects HMIWI door and door gaskets for proper sealing</li> <li>- inspects motors for proper operation</li> <li>- inspects primary chamber refractory lining, and cleans and repairs/replaces lining as necessary</li> <li>- inspects incinerator shell for corrosion and/or hot spots</li> <li>- inspects secondary/tertiary chamber and stack, cleans as necessary</li> <li>- inspects mechanical loader, including limit switches, for proper operation, if applicable</li> <li>- visually inspects waste bed (grates), and repairs/seals, as appropriate</li> <li>- for the burn cycle that follows the inspection, documents that the incinerator is operating properly and makes any necessary adjustments</li> <li>- inspects air pollution control devices(s) for proper operation, if applicable</li> <li>- inspects waste heat boiler systems to ensure proper operation, if applicable</li> <li>- inspects bypass stack components</li> <li>- ensures proper calibration of thermocouples, sorbent feed systems, and any other monitoring equipment</li> <li>- generally observes that the equipment is maintained in good operating condition.</li> </ul> <p>Verify that, within 10 operating days following an equipment inspection, all necessary repairs are completed (unless the owner or operator obtains written approval from the Department establishing a date whereby all necessary repairs of the designated facility will be completed).</p> <p>(NOTE: "Small rural HMIWIs" include any small HMIWIs located more than 50 miles from the boundary of the nearest Standard Metropolitan Statistical Area (SMSA) and which burns less than 2000 lb/week of hospital waste and medical/infectious waste. (The quantity limit does not apply during performance tests.)</p>



<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<b>MEDICAL WASTE INCINERATORS</b>  <b>AE.34. Reporting/ Recordkeeping Requirements</b>  <b>AE.34.1.MS.</b> Existing HMIWIs must submit specified information to the appropriate authorities (APC-S-1.12.1 and 1.12.9(b) through (e)) [Added June 2000; Revised May 2004; Citation Revised May 2006].	<p>Verify that the facility submitted the following information no later than 60 days following the initial performance test with all reports signed by the facilities manager:</p> <ul style="list-style-type: none"> <li>– the initial performance test data as recorded</li> <li>– the values for the site-specific operating parameters</li> <li>– the waste management plan.</li> </ul> <p>Verify that the facility submitted an annual report 1 yr following the above submission and that subsequent reports are submitted no more than 12 mo following the previous report (under a Title V operating permit, these submissions are semi-annual).</p> <p>Verify that the annual report is signed by the facilities manager and includes:</p> <ul style="list-style-type: none"> <li>– the values for the site-specific operating parameters</li> <li>– the highest maximum operating parameter and the lowest minimum operating parameter, as applicable, for each operating parameter recorded for the calendar year being reported</li> <li>– the highest maximum operating parameter and the lowest minimum operating parameter, as applicable for each site-specific operating parameter for the calendar year preceding the year being reported, in order to provide the EPA Administrator with a summary of the performance of the HMIWI over a 2-yr period</li> <li>– any information, recorded for the calendar year being reported, related to:             <ul style="list-style-type: none"> <li>– identification of calendar days for which data on emission rates or operating parameters as described above have not been obtained, with an identification of the emission rates or operating parameters not measured, reasons for not obtaining the data, and a description of corrective actions taken</li> <li>– identification of calendar days, times, and durations of malfunctions with description of the malfunction and the corrective action taken</li> <li>– identification of calendar days for which data on emission rates or operating parameters as described above exceeded the applicable limits, with a description of the exceedances, reasons for such exceedances, and a description of corrective actions taken</li> </ul> </li> <li>– any information, recorded for the calendar year preceding the year being reported, in order to provide the EPA Administrator with a summary of the</li> </ul>

<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
	<p>performance of the HMIWI over a 2-yr period, related to:</p> <ul style="list-style-type: none"> <li>– identification of calendar days for which data on emission rates or operating parameters as described above have not been obtained, with an identification of the emission rates or operating parameters not measured, reasons for not obtaining the data, and a description of corrective actions taken</li> <li>– identification of calendar days, times, and durations of malfunctions with a description of the malfunction and the corrective action taken</li> <li>– identification of calendar days for which data on emission rates or operating parameters as described above exceeded the applicable limits, with a description of the exceedances, reasons for such exceedances, and a description of corrective actions taken</li> <li>– if a performance test was conducted during the reporting period, the results of that test</li> <li>– if no exceedances or malfunctions were reported for the calendar year being reported, a statement that no exceedances occurred during the reporting period.</li> <li>– any use of the bypass stack, the duration, reason for malfunction, and corrective action taken.</li> </ul> <p>Verify that the facility submits semiannual reports no later than 60 days following the reporting period containing any recorded information regarding:</p> <ul style="list-style-type: none"> <li>– identification of calendar days for which data on emission rates or operating parameters as described above have not been obtained, with an identification of the emission rates or operating parameters not measured, reasons for not obtaining the data, and a description of corrective actions taken</li> <li>– identification of calendar days, times and durations of malfunctions, a description of the malfunction, and the corrective action taken</li> <li>– identification of calendar days for which data on emission rates or operating parameters as described above exceeded the applicable limits, with a description of the exceedances, reasons for such exceedances, and a description of corrective actions taken.</li> </ul> <p>(NOTE: The first semiannual reporting period ends 6 mo following the submission of information as required above. Subsequent reports will be submitted no later than 6 calendar months following the previous report. All reports will be signed by the facilities manager.)</p> <p>Verify that all records specified above are maintained onsite in either paper copy or computer-readable format, unless an alternative format is approved by the Administrator.</p> <p>(NOTE: The requirements of this subsection apply to each individual hospital/medical/infectious waste incinerator (HMIWI) for which construction was commenced on or before 20 June 1996. These requirements do not apply to the following:</p>

<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>AE.34.2.MS.</b> Existing HMIWIs must maintain specific documentation at the facility (APC-S-1.12.4(i) through (k)) [Added June 2000; Revised May 2004; Citation Revised May 2006].</p>	<ul style="list-style-type: none"> <li>– a combustor during periods when only pathological waste, low-level radioactive waste, and/or chemotherapeutic waste is burned, provided the owner or operator of the combustor:               <ul style="list-style-type: none"> <li>– notifies the Administrator of an exemption claim</li> <li>– keeps records on a calendar quarter basis of the periods of time when only pathological waste, low-level radioactive waste and/or chemotherapeutic waste is burned</li> </ul> </li> <li>– any co-fired combustor if the owner or operator:               <ul style="list-style-type: none"> <li>– notifies the Administrator of an exemption claim</li> <li>– provides an estimate of the relative amounts of hospital waste, medical/infectious waste, and other fuels and wastes to be combusted</li> <li>– keeps records on a calendar quarter basis of the weight of hospital waste and medical/infectious waste combusted, and the weight of all other fuels and wastes combusted at the co-fired combustor</li> </ul> </li> <li>– any combustor required to have a permit under section 3005 of the <i>Solid Waste Disposal Act</i> (SWDA)</li> <li>– any combustor which meets the applicability requirements under subpart Cb, Ea, or Eb of 40 CFR 60 (standards or guidelines for certain municipal waste combustors)</li> <li>– any pyrolysis unit (see definitions)</li> <li>– cement kilns firing hospital waste and/or medical/infectious waste</li> <li>– physical or operational changes made to an existing HMIWI solely for the purpose of complying with emission guidelines of this subsection are not considered a modification and do not result in an existing HMIWI becoming subject new source performance standards under APC-S-1.6.4 and 40 CFR 60, Subpart Ec.)</li> </ul> <p>(NOTE: HMIWIs shall operate pursuant to a permit issued under APC-S-6 by 15 September 2000.)</p> <p>(NOTE: See applicability and exemptions notes in AE.34.1.MS.)</p> <p>Verify that the following documentation is maintained at the HMIWI:</p> <ul style="list-style-type: none"> <li>– summary of the applicable standards</li> <li>– description of basic combustion theory applicable to an HMIWI</li> <li>– procedures for receiving, handling, and charging waste</li> <li>– HMIWI startup, shutdown, and malfunction procedures</li> <li>– procedures for maintaining proper combustion air supply levels</li> <li>– procedures for operating the HMIWI and associated air pollution control systems within the standards established under this subpart</li> <li>– procedures for responding to periodic malfunction or conditions that may lead to malfunction</li> <li>– procedures for monitoring HMIWI emissions</li> <li>– reporting and recordkeeping procedures</li> </ul>

<b>COMPLIANCE CATEGORY:</b> <b>AIR EMISSIONS MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>AE.34.3.MS.</b> Existing HMIWIs must maintain specified information for a period of at least 5 yr (APC-S-1-12.9.a) [Added June 2000; Revised May 2004; Citation Revised May 2006].</p>	<ul style="list-style-type: none"> <li>– procedures for handling ash.</li> </ul> <p>Verify that a program has been established that requires all HMIWI operators to review annually the information in all required documentation.</p> <p>(NOTE: The initial review of the information in all required documentation shall be conducted by 16 September 1998 or prior to assumption of responsibilities affecting HMIWI operation, whichever date is later.)</p> <p>Verify that subsequent reviews of the information in all required documentation is conducted annually.</p> <p>Verify that all required documentation is kept in a readily accessible location for all HMIWI operators.</p> <p>(NOTE: All required documentation, as well as all training records, shall be available for inspection by the EPA or its delegated enforcement agent upon request.)</p> <p>(NOTE: Required records should be maintained onsite in either a paper copy or a computer-readable format.)</p> <p>Verify that the facility maintains the following information (as applicable) for a period of at least 5 yr:</p> <ul style="list-style-type: none"> <li>– calendar date of each record</li> <li>– records of the following data: <ul style="list-style-type: none"> <li>– concentrations of any pollutant listed in Appendix 1-3 or measurements of opacity as determined by the CEMS</li> <li>– results of fugitive emissions tests</li> <li>– HMIWI charge dates, times, and weights and hourly charge rates</li> <li>– fabric filter inlet temperatures during each minute of operation</li> <li>– amount and type of dioxin/furan sorbent used during each hour of operation</li> <li>– amount and type of Hg sorbent used during each hour of operation</li> <li>– amount and type of HCl sorbent used during each hour of operation</li> <li>– secondary chamber temperatures recorded during each minute of operation</li> <li>– liquor flow rate to the wet scrubber inlet during each minute of operation</li> <li>– horsepower or amperage to the wet scrubber during each minute of operation</li> <li>– pressure drop across the wet scrubber system during each minute of operation</li> <li>– temperature at the outlet from the wet scrubber during each minute of</li> </ul> </li> </ul>

<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>AE.34.4.MS.</b> Small rural HMIWIs must meet specific recordkeeping requirements (APC-S-1-12.9.f) [Added June 2000; Revised May 2004].</p>	<ul style="list-style-type: none"> <li>operation               <ul style="list-style-type: none"> <li>– pH at the inlet to the wet scrubber during each minute of operation</li> <li>– records indicating use of the bypass stack, including dates, times, and durations</li> <li>– for site-specific operating parameters, all operating parameter data collected</li> </ul> </li> <li>– identification of calendar days for which data on emission rates or operating parameters have not been obtained, with an identification of the emission rates or operating parameters not measured, reasons for not obtaining the data, and a description of corrective actions taken</li> <li>– identification of calendar days, times, and durations of malfunctions with a description of the malfunction and the corrective action taken</li> <li>– identification of calendar days for which data on emission rates or operating parameters exceeded the applicable limits, with a description of the exceedances, reasons for such exceedances, and a description of corrective actions taken.</li> <li>– the results of the initial, annual, and any subsequent performance tests conducted to determine compliance with the emission limits and/or to establish operating parameters</li> <li>– all documentation produced as a result of the siting requirements</li> <li>– records showing the names of HMIWI operators who completed the review of information (see checklist item AE.34.1.MS.), including the date of the initial review and all subsequent annual reviews</li> <li>– records showing the names of HMIWI operators who have completed training, including documentation of training and dates of training</li> <li>– records showing the names of the HMIWI operators who have met the criteria for qualification and the dates of their qualification</li> <li>– records of calibration of any monitoring devices.</li> </ul> <p>(NOTE: See applicability and exemptions notes in AE.34.1.MS.)</p> <p>(NOTE: These requirements apply to any small HMIWI subject to the emission limits in Table 2 of Appendix 1-3.)</p> <p>Verify that small rural HMIWIs maintain records of the annual equipment inspections, any required maintenance, and any repairs not completed within 10 days of an inspection or the timeframe established by the Department.</p> <p>Verify that small rural HMIWIs submit an annual report containing the information listed in the previous paragraph no later than 60 days following the year in which data were collected.</p> <p>Verify that subsequent reports are sent no later than 12 calendar months following the previous report (once the unit is subject to permitting requirements in Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act, APC-S-6, the owner or operator must submit these reports</p>

<b>COMPLIANCE CATEGORY:</b> <b>AIR EMISSIONS MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
	semiannually).  Verify that the report is signed by the facility manager.

<b>COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>AE.130.</b></p> <p><b>OPEN BURNING</b></p> <p><b>AE.130.1.MS.</b> Facilities must meet specific requirements for opening burning (APC-S-1.3.7) [Revised May 2004].</p>	<p>Verify that the facility does not allow the open burning of residential, commercial, institutional, or industrial solid waste.</p> <p>(NOTE: The prohibition against open burning does not apply to infrequent burning of agricultural wastes in the field, silvicultural wastes for forest purposes, land-clearing debris, debris from emergency cleanup operations, and ordinance. The term <i>infrequent</i> is not defined in the Mississippi regulation.)</p> <p>Verify that fires set for the burning of agricultural wastes in the field and/or silvicultural wastes for forest management meet the following requirements:</p> <ul style="list-style-type: none"> <li>- a permit is obtained from the Mississippi Forestry Commission when there is a Forestry Commission tower serving the area in which the burning occurs</li> <li>- the burning occurs within a time period allowing adequate diffusion of air pollutants according to the permit and the daily weather guides issued by the National Weather Forecast Office</li> <li>- starter or auxiliary fuels consist only of either dried vegetation; petroleum derived fuels of the gasoline, kerosene, or light fuel oil types (diesel); or a combination thereof.</li> </ul> <p>Verify that the facility does not use combustible materials that cause excessive visible emissions (i.e., rubber tires, plastic materials, etc.).</p> <p>Verify that the facility does not use starter or auxiliary fuels that cause excessive smoke (i.e., rubber tires, plastics, etc.).</p> <p>Verify that the facility does not allow open burning in any of the following situations:</p> <ul style="list-style-type: none"> <li>- when open burning is prohibited by local ordinances</li> <li>- when it causes a traffic hazard</li> <li>- where a High Fire Danger Alert is declared by the Mississippi Forestry Commission</li> <li>- when an Emergency Air Pollution Alert is imposed by the Executive Director.</li> </ul> <p>Verify that the facility meets the following requirements for buffer zones:</p> <ul style="list-style-type: none"> <li>- open burning without a forced-draft air system does not occur within 500 yd of an occupied dwelling</li> <li>- open burning utilizing a forced-draft air system on all fires to improve the combustion rate and reduce smoke does not occur within 50 yd of an occupied dwelling</li> </ul>

<b>COMPLIANCE CATEGORY:</b> <b>AIR EMISSIONS MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
	- open burning does not occur within 500 yd of commercial airport property, private air fields, or marked off-runway aircraft approach corridors without written approval from the proper airport authority, owner, or operator.



## **Appendix 1-1**

### **Maximum Permissible Emission of Ash and/or Particulate Matter from Fossil Fuel Burning Sources**

(Source: APC-S-1.3.4.a)

Fossil Fuel Burning. The maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations shall be limited as follows:

1. Emissions from installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input.
2. Emissions from installations equal to or greater than 10 million BTU per hour heat input but less than 10,000 million BTU per hour heat input shall not exceed an emission rate as determined by the relationship

$$E = 0.8808 * I - 0.1667$$

where E is the emission rate in pounds per million BTU per hour heat input and I is the heat input in millions of BTU per hour.

3. Emissions from installations equal to or greater than 10,000 million BTU per hour heat input shall not exceed 0.19 pounds per million BTU per hour heat input.

## **Appendix 1-2**

### **Categories of Stationary Sources to be Included in the Determination of Major Sources**

(Source: APC-S-6.I.A(17))

The fugitive emissions of a stationary source are not to be considered in determining whether it is a major stationary source for the purposes of Section 302<sup>(j)</sup> of the Federal Act, unless the source belongs to one of the following categories of stationary sources:

- 1) coal cleaning plants (with thermal dryers)
- 2) kraft pulp mills
- 3) portland cement plants
- 4) primary zinc smelters
- 5) iron and steel mills
- 6) primary aluminum ore reduction plants
- 7) primary copper smelters
- 8) municipal incinerators capable of charging more than 250 tons of refuse per day
- 9) hydrofluoric, sulfuric, or nitric acid plants
- 10) petroleum refineries
- 11) lime plants
- 12) phosphate rock processing plants
- 13) coke oven batteries
- 14) sulfur recovery plants
- 15) carbon black plants (furnace process)
- 16) primary lead smelters
- 17) fuel conversion plants
- 18) sintering plants
- 19) secondary metal production plants
- 20) chemical process plants
- 21) fossil-fuel boilers (or combination thereof) totaling more than 250 MBtu/h heat input
- 22) petroleum storage and transfer units with a total storage capacity exceeding 300,000 bbl
- 23) taconite ore processing plants
- 24) glass fiber processing plants
- 25) charcoal production plant
- 26) fossil-fuel-fired steam electric plants of more than 250 MBtu/h heat input
- 27) all other stationary source categories regulated by a standard promulgated under Section 111 or 112 of the Federal Act, but only with respect to those air pollutants that have been regulated for that category.

### Appendix 1-3

#### Emission Limits for HMIWI

(Source: APC-S-1.12.3, Tables 1 and 2) [Added June 2000; Revised May 2006]

Table 2, below, applies to small rural HMIWIs: Small HMIWIs located more than 50 miles from the boundary of the nearest Standard Metropolitan Statistical Area (SMSA) and which burns less than 2000 lb/week of hospital waste and medical/infectious waste. (The quantity limit does not apply during performance tests.) Table 1 applies to all others.

Table 1:Emission Limits for Small, Medium, and Large HMIWIs				
Pollutant	Units (7 percent oxygen, dry basis)	Emission Limits		
		HMIWI size		
		Small	Medium	Large
Particulate matter	Milligrams per dry standard cubic meter (grains per dry standard cubic foot)	115 (0.05)	69 (0.03)	34 (0.015)
Carbon monoxide	Parts per million by volume	40	40	40
Dioxins/furans	Nanograms per dry standard cubic meter total dioxins/furans (grains per billion dry standard cubic feet) or nanograms per dry standard cubic meter total dioxins/furans TEQ (grains per billion dry standard cubic feet).	125 (55) or 2.3 (1.0)	125 (55) or 2.3 (1.0)	125 (55) or 2.3 (1.0)
Hydrogen chloride	Parts per million or percent reduction	100 or 93 percent	100 or 93 percent	100 or 93 percent
Sulfur dioxide	Parts per million by volume	55	55	55
Nitrogen oxides	Parts per million by volume	250	250	250
Lead	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet) or percent reduction	1.2 (0.52) or 70 percent	1.2 (0.52) or 70 percent	1.2 (0.52) or 70 percent
Cadmium	Milligrams per dry standard cubic meter (grains per thousand per dry standard cubic feet) or percent reduction	0.16 (0.07) or 65 percent	0.16 (0.07) or 65 percent	0.16 (0.07) or 65 percent
Mercury	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet) or percent reduction.	0.55 (0.24) or 85 percent	0.55 (0.24) or 85 percent	0.55 (0.24) or 85 percent

<b>Table 2. Emission Limits for Small Rural HMIWI</b>		
<b>Pollutant</b>	<b>Units (7 percent oxygen, dry basis)</b>	<b>HMIWI Emission Limits</b>
Particulate matter	Milligrams per dry standard cubic meter (grains per dry standard cubic foot)	197 (0.086)
Carbon monoxide	Parts per million by volume	40
Dioxins/furans	Nanograms per dry standard cubic total dioxins/furans (grains per billion dry standard cubic feet) or nanograms per dry standard cubic meter TEQ (grains per billion dry standard cubic feet)	800 (350) or 15 (6.6)
Hydrogen chloride	Parts per million by volume	3100
Sulfur dioxide	Parts per million by volume	55
Nitrogen oxides	Parts per million by volume	250
Lead	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet)	10 (4.4)
Cadmium	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet)	4 (1.7)
Mercury	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet)	7.5 (3.3)

## Appendix 1-4

### Operating Parameters for HMIWIs to Be Monitored and Minimum Measurement and Recording Frequencies

(Source: APC-S-1.12.8, Table 4)

[Added June 2000]

Operating parameters to be monitored	Minimum Frequency		Control System		
	Data measurement	Data recording	Dry scrubber followed by fabric filter	Wet scrubber	Dry scrubber followed by fabric filter and wet scrubber
Maximum operating parameters:					
Maximum charge rate	Continuous	1 x hour	x	x	x
Maximum fabric filter inlet temperature	Continuous	1 x minute	x		x
Maximum flue gas temperature	Continuous	1 x minute	x	x	
Minimum operating parameter:					
Minimum secondary chamber temp.	Continuous	1 x minute	x	x	x
Minimum dioxin/furan sorbent flow rate	Hourly	1 x hour	x		x
Minimum HCl sorbent flow rate	Hourly	1 x hour	x		x
Minimum mercury (Hg) sorbent flow rate	Hourly	1 x hour	x		x
Minimum pressure drop across the wet scrubber or minimum horsepower or amperage to wet scrubber	Continuous	1 x minute		x	x
Minimum scrubber liquor flow rate	Continuous	1 x minute		x	x
Minimum scrubber liquor pH	Continuous	1 x minute		x	x

## Appendix 1-5

### Exclusions From Permit Requirements (APC-S-2.XIII) [Added June 2000; Revised May 2006]

A. New Source Permit to Construct.

Any new "Greenfield" stationary source must obtain a permit to construct except as excluded in D. or E.

B. Compliance with Other Applicable Requirements.

Exclusions from permit requirements does not exclude anyone from complying with all other applicable requirements and regulations.

C. Maintenance of Emission Increase Records.

Stationary sources excluded from the requirement for a permit to construct must maintain records of any emissions increases associated with any excluded activities and report that to DEQ upon request. Indirect measurements of emissions increases are allowable for these recordkeeping requirements.

D. Categorical Exclusions from Both Permit to Construct and Operate.

The following machines, devices, articles, contrivances, or facilities are excluded from the requirement for a permit to construct or a permit to operate.

1. Residential heating, cooking, or cleaning devices.
2. Residential yard and garden equipment.
3. Mobile sources.
4. Air conditioning, space heating, or ventilating systems not uniquely designed or operated in a manner to remove air contaminants generated by or released from equipment.
5. Stationary sources, other than incinerators or CAFOs, which do not emit or have potential uncontrolled emissions of 10 TPY or more of either PM(10), SO(2), NO(X), CO or VOC, nor 1.0 TPY of a HAP, nor 2.5 TPY of all HAPs.
6. Feed milling facilities which mill, formulate, or otherwise prepare animal feed products for direct local retail sale solely in prepackaged form and are not associated with a grain elevator. Milling facilities engaged in preparing feed products for wholesale distribution and/or bulk sale are not included in this exclusion.
7. Sawmills/woodworking plants which do not have drying kilns onsite and process less than 25,000 board feet/day.
8. Any equipment used exclusively for preparation of food for direct retail sale at a restaurant, cafeteria, bakery, or food service.
9. Auto body shops with only one (1) paint spray booth and with substantial portions of business devoted to repainting entire vehicles or collision repairs.
10. Surface sand and/or gravel mining operations which do not utilize rock crushers, pneumatic conveyors, or dust collectors.
11. Recreational heaters.
12. Gasoline service stations with no more than 17 refueling positions.
13. Retail propane filling operations
14. Outdoor kerosene heaters
15. Refrigeration systems

E. Emission-Based Exclusion from Permit to Construct.

The following emissions units are excluded from the requirement for a permit to construct provided the unit is not a new major stationary source, major source of hazardous air pollutants, major modification or moderate modification nor a part of a new major stationary source, major source of hazardous air pollutants, major modification, or moderate modification.

1. Coal or residual oil-fired combustion devices or groups of devices with a total rated input capacity of less than 2,000,000 BTU/hr, clean wood waste boilers or groups of boilers with a total rated input capacity of less than 10,000,000 BTU/hr, distillate oil or combination distillate and gas-fired units or

groups of units with a total rated input capacity less than 10,000,000 BTU/hr and natural gas fired and/or LPG fired devices or groups of devices with all individual rated input capacities of less than 10,000,000 BTU/hr and a total rated input capacity less than 25,000,000 BTU/hr.

2. Equipment used exclusively for oil and gas field production, gathering, storing, and transmission, including, but not limited to: Gas/oil separators, emulsion treaters, free water knockouts, compressors or group of compressors with a total rated capacity less than 500 brake horsepower, segregation basins, API oil/water separators, tank facilities, and crude oil loading equipment used solely for crude oil collected from production wells onsite. Continuous flaring of sour gas and/or combustion devices firing sour gas are not excluded from permitting.
3. Emergency safety relief systems, including pilot lights.
4. Sand blasting operations which use no more than 83 tons of sand in any given 365-day period.
5. Wood, plastic, and/or metal machining operations which are totally enclosed within a building, and which have no direct exhausts to the ambient air other than common building ventilation points.
6. Petroleum products storage facilities with no individual storage tank greater than 19,800 gallons and total storage capacity less than 55,000 gallons.
7. A compressor or groups of compressors firing either natural gas, gasoline, LPG and/or diesel fuel with a total rated capacity less than or equal to 500 brake horsepower.
8. Surface coating operations which utilize less than 50 pounds per day of all solvents and coatings.
9. Fire training exercises and equipment.
10. Groundwater recovery/treatment facilities used for the remediation of motor fuel contamination addressed under the Underground Storage Tank Program when the facilities are located on the site of the contamination.
11. Temporary storage/aeration of soils contaminated with motor fuel which are produced as a result of a remedial response to a release from an underground storage tank when the storage/operation is on the site of the tank.
12. CERCLA/Superfund remediation or removal projects on the site of the contamination.
13. Remediation of sites contaminated with hazardous constituents required under State authority on the site of the contamination.
14. Portable TSCA treatment facilities permitted by EPA.
15. Wastewater collection and treatment facilities, other than CAFOs or those listed in 40 CFR 61, Subpart FF - National Emission Standard for Benzene Waste Operations and in 40 CFR 60, Subpart QQQ, - Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems, which have the potential to emit no more than 5 tons/year of Volatile Organic Compounds (VOC).
16. Surface coal mining operations for which a permit has been issued by the Permit Board pursuant to Miss. Code Ann. §§ 53-9-1, et seq. or by the Federal Office of Surface Mining pursuant to the Federal Surface Mining Control and Reclamation Act, 30 U.S.C. §§ 1201, et seq. However, any rock crushers, pneumatic conveyors, and dust collectors at such operations may require permitting if they meet the definition of "stationary source".
17. Auto body shops.
18. Dedicated fuel stations with total storage capacity less than 55,000 gallons and no individual tank greater than 19,800 gallons.
19. Subject to Section XIV., any existing or new animal feeding operation that is not a concentrated animal feeding operation (CAFO) and that does not incinerate animal carcasses or waste. For the purpose of this paragraph, "animal feeding operation" means any facility where animals have been, are, or will be stabled or confined, or allowed to roam or graze within a fenced or otherwise restricted area. This definition includes, but is not limited to, aquatic animal production facilities, kennels, swine growing operations, veal farms, chicken growing operations, cattle growing operations, and dairies.
20. Initial field testing of oil and gas wells, after proper notification to the Commission provided such tests will not produce 100 tons per year or more of any pollutant.

F. De minimis NSR Modification Exclusion from Permit to Construct

A de minimis NSR modification is excluded from the requirements for a permit to construct. This does not eliminate any requirement for modification of Title V permits or permits to operate for de minimis

modifications. Any other modifications including modifications involving netting are subject to the requirements for permits to construct

G. Exclusion from Permit to Operate.

Major Title V sources, other sources required to obtain a Title V Permit to Operate, synthetic minor sources, and significant minor sources are subject to the requirements for a permit to operate. Any other source is excluded from the requirement to obtain a permit to operate. Exclusion from the permit to operate requirement does not imply exclusion from any other requirements of these regulations including permit to construct requirements before construction and certification of construction requirements before beginning operation.

H. General Permit May Supersede Exclusions

The Permit Board may issue a general permit which shall supersede the exclusions listed in D., E., and G. above



## Appendix 1-6

### Existing CISWI: Applicability and Exemptions

(APC-S-1.13.1 and 1.13.2) [Added May 2003]

#### Section 13. Provisions for Existing Commercial and Industrial Solid Waste Incineration Units.

1. Emission Standards. Provisions under this paragraph that apply to existing commercial and industrial solid waste incineration (CISWI) units are the requirements that are contained in 40 CFR 60.2575 through 60.2875. All such requirements are hereby adopted by reference by the Commission as official regulations of the State of Mississippi and shall hereafter be enforceable as such.

2. Applicability. The requirements of Section 13 shall apply to each existing commercial and industrial solid waste incineration unit that commenced construction on or before November 30, 1999 and meets the following criteria:

- (a) Commercial and industrial solid waste incineration (CISWI) unit means any combustion device that combusts commercial and industrial waste. The boundaries of a CISWI unit are defined as, but not limited to, the commercial or industrial solid waste fuel feed system, grate system, flue gas system, and bottom ash. The CISWI unit does not include air pollution control equipment or the stack. The CISWI unit boundary starts at the commercial and industrial solid waste hopper (if applicable) and extends through two areas: (1) the combustion unit flue gas system, which ends immediately after the last combustion chamber and (2) the combustion unit bottom ash system, which ends at the truck loading station or similar equipment that transfers the ash to final disposal. It includes all ash handling systems connected to the bottom ash handling system.
- (b) Commercial and industrial waste means solid waste combusted in an enclosed device using controlled flame combustion without energy recovery that is a distinct operating unit of any commercial or industrial facility (including field-erected, modular, and custom built incineration units operating with starved or excess air), or solid waste combusted in an air curtain incinerator without energy recovery that is a distinct operating unit of any commercial or industrial facility.
- (c) Solid waste means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, agricultural operations, and from community activities but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under Section 402 of the Federal Water Pollution Control Act, as amended (42 U.S.C. 1342), or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (42 U.S.C. 2014).
- (d) Solid waste combustion units are exempt from the requirements of Section 13 as described and set forth below:
  - (1) Pathological waste incineration units. Incineration units burning 90 percent or more by weight (on a calendar quarter basis and excluding the weight of auxiliary fuel and combustion air) of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste as defined in 40 CFR 60.2875 are not subject to the requirements of Section 13 if the owner or operator of the CISWI unit meets the two requirements specified in (1)(i) and (ii) of this paragraph.
    - (i) Notify the Executive Director that the unit meets these criteria.
    - (ii) Keep records on a calendar quarter basis of the weight of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste burned, and the weight of all other fuels and wastes burned in the unit.
  - (2) Agricultural waste incineration units. Incineration units burning 90 percent or more by weight (on a calendar quarter basis and excluding the weight of auxiliary fuel and combustion air) of agricultural wastes as defined in 40 CFR 60.2875 are not subject to the requirements of Section 13 if the owner or operator of the CISWI unit meets the two requirements specified in (2)(i) and (ii) of this paragraph.
    - (i) Notify the Executive Director that the unit meets these criteria.
    - (ii) Keep records on a calendar quarter basis of the weight of agricultural waste burned, and the weight of all other fuels and wastes burned in the unit.

- (3) Municipal waste combustion units. Incineration units that meet either of the two criteria specified in (3)(i) or (ii) of this paragraph.
  - (i) Are regulated under 40 CFR 60, Subpart Ea (Standards of Performance for Municipal Waste Combustors); 40 CFR 60, Subpart Eb (Standards of Performance for Municipal Waste Combustors for Which Construction is Commenced After September 20, 1994); 40 CFR 60, Subpart Cb (Emission Guidelines and Compliance Time for Large Municipal Combustors that are Constructed on or Before September 20, 1994); 40 CFR 60, Subpart AAAA (Standards of Performance for New Stationary Sources: Small Municipal Waste Combustion Units); or 40 CFR 60, Subpart BBBB (Emission Guidelines for Existing Stationary Sources: Small Municipal Waste Combustion Units).
  - (ii) Burn greater than 30 percent municipal solid waste or refuse-derived fuel, as defined in Subpart Ea, Subpart Eb, Subpart AAAA, and Subpart BBBB, and that have the capacity to burn less than 35 tons (32 megagrams) per day of municipal solid waste or refuse-derived fuel, if the owner or operator of the CISWI unit meets the two requirements in (3) (ii) (A) and (B) of this paragraph.
    - (A) Notify the Executive Director that the unit meets these criteria.
    - (B) Keep records on a calendar quarter basis of the weight of municipal solid waste burned, and the weight of all other fuels and wastes burned in the unit.
- (4) Medical waste incineration units. Incineration units regulated under 40 CFR 60, Subpart Ec (Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996) or 40 CFR 60, Subpart Ca (Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators).
- (5) Small power production facilities. Units that meet the three requirements specified in (5)(i) through (iii) of this paragraph.
  - (i) The unit qualifies as a small power-production facility under section 3 (17)(C) of the Federal Power Act (16 U.S.C. 796 (17)(C)).
  - (ii) The unit burns homogeneous waste (not including refuse-derived fuel) to produce electricity.
  - (iii) The owner or operator of the CISWI unit notifies the Executive Director that the unit meets all of these criteria.
- (6) Co-generation facilities. Units that meet the three requirements specified in (6)(i) through (iii) of this paragraph.
  - (i) The unit qualifies as a co-generation facility under section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B)).
  - (ii) The unit burns homogeneous waste (not including refuse-derived fuel) to produce electricity and steam or other forms of energy used for industrial, commercial, heating, or cooling purposes.
  - (iii) The owner or operator of the CISWI unit notifies the Executive Director that the unit meets all of these criteria.
- (7) Hazardous waste combustion units. Units that meet either of the two criteria specified in (7)(i) or (ii) of this paragraph.
  - (i) Units for which the owner or operator is required to get a permit under section 3005 of the Solid Waste Disposal Act.
  - (ii) Units regulated under Subpart EEE of 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors).
- (8) Materials recovery units. Units that combust waste for the primary purpose of recovering metals, such as primary and secondary smelters.
- (9) Air curtain incinerators. Air curtain incinerators that burn only the materials listed in (9)(i) through (iii) of this paragraph are only required to meet the requirements under "Air Curtain Incinerators" 40 CFR 60.2810 through 60.2870).
  - (i) 100 percent wood waste.
  - (ii) 100 percent clean lumber.
  - (iii) 100 percent mixture of only wood waste, clean lumber, and/or yard waste.
- (10) Cyclonic barrel burners. (See 40 CFR 60.2875)
- (11) Rack, part, and drum reclamation units. (See 40 CFR 60.2875)
- (12) Cement kilns. Kilns regulated under Subpart LLL of 40 CFR Part 63 (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry).

- (13) Sewage sludge incinerators. Incineration units regulated under Subpart O of 40 CFR Part 60 (Standards of Performance for Sewage Treatment Plants).
- (14) Chemical recovery units. Combustion units burning materials to recover chemical constituents or to produce chemical compounds where there is an existing commercial market for such recovered chemical constituents or compounds. The seven types of units described in (14)(i) through (vii) of this paragraph are considered chemical recovery units.
  - (i) Units burning only pulping liquors (i.e., black liquor) that are reclaimed in a pulping liquor recovery process and reused in the pulping process.
  - (ii) Units burning only spent sulfuric acid used to produce virgin sulfuric acid.
  - (iii) Units burning only wood or coal feedstock for the production of charcoal.
  - (iv) Units burning only manufacturing byproduct streams/residues containing catalyst metals which are reclaimed and reused as catalysts or used to produce commercial grade catalysts.
  - (v) Units burning only coke to produce purified carbon monoxide that is used as an intermediate in the production of other chemical compounds.
  - (vi) Units burning only hydrocarbon liquids or solids to produce hydrogen, carbon monoxide, synthesis gas, or other gases for use in other manufacturing processes.
  - (vii) Units burning only photographic film to recover silver.
- (15) Laboratory analysis units. Units that burn samples of materials for the purpose of chemical or physical analysis.

## Appendix 1-7

### Existing CISWI: Emission Limitations

(APC-S-1.13 and 40 CFR 60, Subpart DDDD Table 2) [Added May 2003]

For The Air Pollutant	You Must Meet This Emission Limitation <sup>(a)</sup>	Using This Averaging Time	And Determining Compliance Using This Method
Cadmium	0.004 milligrams per dry standard cubic meter	3-run average (1 hour minimum sample time per run)	Performance test (Method 29 of Appendix A of this part).
Carbon monoxide	157 parts per million by dry volume	3-run average (1 hour minimum sample time per run)	Performance test (Method 10, 10A, or 10B of appendix A of this part).
Dioxins/furans (toxic equivalency basis; see Appendix 1-9 for further details)	0.41 nanograms per dry standard cubic meter	3-run average (1 hour minimum sample time per run)	Performance test (Method 23 of Appendix A of this part).
Hydrogen chloride	62 parts per million by dry volume	3-run average (1 hour volume minimum sample time per run)	Performance test (Method 26A of appendix A of this part).
Lead	0.04 milligrams per dry standard cubic meter	3-run average (1 hour minimum sample time per run)	Performance test (Method 29 of appendix A of this part).
Mercury	0.47 milligrams per dry standard cubic meter	3-run average (1 hour minimum sample time per run)	Performance test (Method 29 of appendix A of this part).
Opacity	10 percent	6-minute averages	Performance test (Method 9 of appendix A of this part).

<b>For The Air Pollutant</b>	<b>You Must Meet This Emission Limitation<sup>{a}</sup></b>	<b>Using This Averaging Time</b>	<b>And Determining Compliance Using This Method</b>
Oxides of nitrogen	388 parts per million by dry volume	3-run average (1 hour minimum sample time per run)	Performance test (Method 7, 7A, 7C, 7D, or 7E of appendix A of this part)
Particulate matter	70 milligrams per dry standard cubic meter	3-run average (1 hour minimum sample time per run)	Performance test (Method 5 or 29 of appendix A of this part).
Sulfur dioxide	20 parts per million by dry volume	3-run average (1 hour volume minimum sample time per run)	Performance test (Method 6 or 6c of appendix A of this part).

<sup>{a}</sup> All emission limitations (except for opacity) are measured at 7 percent oxygen, dry basis at standard conditions.

## Appendix 1-8

### Existing CISWI: Operating Limits for Wet Scrubbers (APC-S-1.13 and 40 CFR 60, Subpart DDDD Table 3) [Added May 2003]

For These Operating Parameters	You Must Establish These Operating Limits	And Monitoring Using These Minimum Frequencies		
		Data Measurement	Data Recording	Averaging Time
Charge rate	Maximum charge rate	Continuous	Every hour	Daily (batch units) 3-hour rolling (continuous and intermittent units) <sup>{a}</sup>
Pressure drop across the wet scrubber or amperage to wet scrubber	Minimum pressure drop or amperage	Continuous	Every 15 minutes	3-hour rolling <sup>{a}</sup>
Scrubber liquor flow rate	Minimum flow rate	Continuous	Every 15 minutes	3-hour rolling <sup>{a}</sup>
Scrubber liquor pH	Minimum pH	Continuous	Every 15 minutes	3-hour rolling <sup>{a}</sup>

<sup>{a}</sup> Calculated each hour as the average of the previous 3 operating hours.

## Appendix 1-9

### Existing CISWI: Toxic Equivalency Factors

(APC-S-1.13 and 40 CFR 60, Subpart DDDD Table 4) [Added May 2003]

Table 4 to Subpart DDDD -- Model Rule -- Toxic Equivalency Factors.

Dioxin/furan Congener	Toxic Equivalency Factor
2,3,7,8-tetrachlorinated dibenzo-p-dioxin	1
1,2,3,7,8-pentachlorinated dibenzo-p-dioxin	0.5
1,2,3,4,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,7,8,9-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,6,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzo-p-dioxin	0.01
octachlorinated dibenzo-p-dioxin	0.001
2,3,7,8-tetrachlorinated dibenzofuran	0.1
2,3,4,7,8-pentachlorinated dibenzofuran	0.5
1,2,3,7,8-pentachlorinated dibenzofuran	0.05
1,2,3,4,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,7,8,9-hexachlorinated dibenzofuran	0.1
2,3,4,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzofuran	0.01
1,2,3,4,7,8,9-heptachlorinated dibenzofuran	0.01
octachlorinated dibenzofuran	0.001

## Appendix 1-10

### Existing CISWI: Summary of Reporting Requirements<sup>{a}</sup> (APC-S-1.13 and 40 CFR 60, Subpart DDDD Table 4) [Added May 2003]

Report	Due Date	Contents	Reference
Waste Management Plan	No later than the date specified in Table 1 for submittal of the final control plan.	Waste management plan	40 CFR 60.2755
Initial Test Report	No later than 60 days following the initial performance test	Complete test report for the initial performance test. The values for the site-specific operating limits. Installation of bag leak detection system for fabric filter.	40 CFR 60.2760
Annual report	No later than 12 months following the submission of the initial test report. Subsequent reports are to be submitted no more than 12 months following the previous report	Name and address. Statement and signature by responsible official. Date of report. Values for the operating limits. If no deviations or malfunctions were reported, a statement that no deviations occurred during the reporting period. Highest recorded 3-hour average and the lowest 3-hour average, as applicable, for each operating parameter recorded for the calendar year being reported. Information for deviations or malfunctions recorded under § 60.2140(b)(6) and (c) through (e). If a performance test was conducted during the reporting period, the results of the test. If a performance test was not conducted during the reporting period, a statement that the requirements of § 60.2155(a) or (b) were met. Documentation of periods when all qualified CISWI unit operators were unavailable for more than 8 hours but less than 2 weeks.	40 CFR 60.2765 and 60.2770
Emission limitation or operating limit deviation report	By August 1 of that year for data collected during the first half of the calendar year. By February 1 of the following year for data	.Dates and times of deviation. Averaged and recorded data for those dates. Duration and causes for each deviation and the corrective actions taken.	40 CFR 60.2275 and 60.2780



Report	Due Date	Contents	Reference
	collected during the second half of the calendar year	Copy of operating limit monitoring data and any test reports. Dates, times, and causes for monitor downtime incidents. Whether each deviation occurred during a period of startup, shutdown, or malfunction.	
Qualified operator deviation notification	Within 10 days of deviation	Statement of cause of deviation. Description of efforts to have an accessible qualified operator. The date a qualified operator will be accessible.	40 CFR 60.2785(a)(1)
Qualified operator deviation status report	Every 4 weeks following deviation	Description of efforts to have an accessible qualified operator. The date a qualified operator will be accessible. Request for approval to continue operation.	40 CFR 60.2785(a)(2)
Qualified operator deviation notification of resumed operation	Prior to resuming operation	Notification that you are resuming operation.	40 CFR 60.2785(b)

<sup>{a}</sup> This table is only a summary, see the referenced sections of the rule for the complete requirements.



## SECTION 2

### CULTURAL RESOURCES MANAGEMENT

#### Mississippi Supplement, March 2010

This section covers the state requirements for Cultural Resources Management and is intended to supplement the TEAM Guide. Refer to the TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

#### **Definitions**

- *Archaeological Significance* - possessing the quality or qualities that have yielded or may be likely to yield, information important in Mississippi prehistory or history (Mississippi State Statute, Section 39-7-4).
- *Architectural Significance* - the qualities that embody the distinctive characteristics of type, period or method of construction or that represent the work of a master, or that possess high artistic value. (Mississippi State Statute, Section 39-7-4).
- *Board* - the board of trustees of the Mississippi Department of Archives and History (Mississippi State Statute, Section 39-7-4).
- *Department* - the Mississippi Department of Archives and History (Mississippi State Statute, Section 39-7-4).
- *Historical Significance* - the quality or qualities associated with events that have made a significant contribution to the broad patterns of state, local or national history, or that quality or qualities associated with the lives of persons significant in local, state, or national history (Mississippi State Statute, Section 39-7-4).
- *Restoration* - the returning of an object, building, structure or site to a prior condition, or to an original historic appearance (Mississippi State Statute, Section 39-7-4).

<p><b>CULTURAL RESOURCES MANAGEMENT GUIDANCE FOR MISSISSIPPI CHECKLIST USERS</b></p>						
<p><b>REFER TO CHECKLIST ITEMS:</b></p>						
<table><tr><td>Missing Checklist Items</td><td>CR.2.1.MS.</td></tr><tr><td>Historic Properties</td><td>CR.5.1.MS.</td></tr><tr><td>Archaeological/Indian Sites</td><td>CR.15.1.MS. and CR.15.2.MS.</td></tr></table>	Missing Checklist Items	CR.2.1.MS.	Historic Properties	CR.5.1.MS.	Archaeological/Indian Sites	CR.15.1.MS. and CR.15.2.MS.
Missing Checklist Items	CR.2.1.MS.					
Historic Properties	CR.5.1.MS.					
Archaeological/Indian Sites	CR.15.1.MS. and CR.15.2.MS.					

<b>COMPLIANCE CATEGORY:</b> <b>CULTURAL RESOURCES MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>CR.2.</b></p> <p><b>MISSING CHECKLIST ITEMS</b></p> <p><b>CR.2.1.MS.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).</p>	<p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p>

<b>COMPLIANCE CATEGORY:</b> <b>CULTURAL RESOURCES MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>CR.5.</b></p> <p><b>HISTORIC PROPERTIES</b></p> <p><b>CR.5.1.MS.</b> A valid permit is required to take, alter, or excavate an historical site or structure designated as a Mississippi landmark (Mississippi State Statute, Sections 39-7-9, 39-7-11, and 39-7-31) [Revised May 1998; Revised March 2007].</p>	<p>Verify that Mississippi landmarks are not taken, altered, damaged, destroyed, salvaged, restored, renovated, or excavated without a valid permit.</p> <p>Verify that no person without a permit from the board, and without written permission of the landowner, intentionally injures, disfigures, removes, excavates, damages, takes, digs into, or destroys any prehistoric or historic American Indian or aboriginal burial.</p>

<b>COMPLIANCE CATEGORY:</b> <b>CULTURAL RESOURCES MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>CR.15.</b></p> <p><b>ARCHAEOLOGICAL/ INDIAN SITES</b></p> <p><b>CR.15.1.MS.</b> A valid permit is required to take, alter, or excavate an archaeological or historical site or structure designated as a Mississippi landmark (Mississippi State Statute, Sections 39-7-9, 39-7-11, and 39-7-31) [Revised May 1998].</p> <p><b>CR.15.2.MS.</b> Holders of a burial excavation permit must meet specific standards (CMSR 31 000 044, Treatment of Human Remains) [Citation Revised March 2008].</p>	<p>Verify that sunken, abandoned ships, and wrecks of the sea, all treasures located in, on, or under the surface of state lands, including tidelands, submerged lands, riverbeds, rivers, and the sea, within the jurisdiction of the State of Mississippi are not taken, altered, damaged, destroyed, salvaged, or excavated without a contract or valid permit.</p> <p>Verify that no prehistoric or historic American Indian or aboriginal burial is intentionally injured, disfigured, removed, excavated, damaged, taken, dug into, or destroyed without a valid permit.</p> <p>(NOTE: Sites, objects, buildings, artifacts, implements and locations of archaeological significance, including those pertaining to prehistoric and historical American Indian or aboriginal campsites, dwellings and habitation sites, their artifacts and implements of culture, that are located in, on, or under the surface of Mississippi state lands or a political subdivision of the state must not be taken, altered, destroyed, salvaged or excavated without a valid permit.)</p> <p>Determine whether the facility holds a valid burial excavation permit.</p> <p>Verify that a report, detailing the findings of the excavation, is submitted to the Department of Archives and History within 1 yr of completion of the excavation.</p> <p>Verify that the remains are curated in a professionally acceptable institution or reburied after scientific analysis.</p> <p>(NOTE: The term burial includes the items interred with the body.)</p> <p>Verify that, if burials are discovered during the course of an excavation, the burial remains are recorded and a valid permit is obtained prior to continuing the excavation.</p>





## **SECTION 3**

### **HAZARDOUS MATERIALS MANAGEMENT**

#### **Mississippi Supplement, March 2010**

This section covers the state requirements for Hazardous Materials Management and is intended to supplement the TEAM Guide. Refer to the TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

The Fire Marshal of the State of Mississippi does not regulate the management of hazardous materials at Federal facilities.

Releases in excess of the reportable quantities listed in Appendix 3-1 (in the U.S. TEAM Guide) must be reported to the Emergency Response Commission and the County.

<b>HAZARDOUS MATERIALS MANAGEMENT GUIDANCE FOR MISSISSIPPI CHECKLIST USERS</b>	
<b>REFER TO CHECKLIST ITEMS:</b>	
Missing Checklist Items	HM.2.1.MS.

<b>COMPLIANCE CATEGORY:</b> <b>HAZARDOUS MATERIALS MANAGEMENT</b> <b>Mississippi State Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>HM.2.</b>  <b>MISSING CHECKLIST ITEMS</b>  <b>HM.2.1.MS.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).	<p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p>



**SECTION 4**  
**HAZARDOUS WASTE MANAGEMENT**  
**Mississippi Supplement, March 2010**

This section covers the state requirements for Hazardous Waste Management and is intended to supplement the TEAM Guide. Refer to the TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

The state has adopted the following Federal regulations by reference:

- 40 Code of Federal Regulations (CFR) 260, Hazardous Waste Management System: General.
- 40 CFR 261, Identification and Listing of Hazardous Waste.
- 40 CFR 262, Standards Applicable to Generators of Hazardous Waste.
- 40 CFR 263, Standards Applicable to Transporters of Hazardous Waste.
- 40 CFR 264, Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.
- 40 CFR 265, Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities.
- 40 CFR 266, Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities.
- 40 CFR 268, Land Disposal Restrictions.
- 40 CFR 270, U.S. Environmental Protection Agency (USEPA) Administered Permit Programs: The Hazardous Waste Permit Program.

This Section covers additional Mississippi hazardous waste requirements.

**Definitions**

- *Active Portion of the Facility* - that portion of the facility where treatment, storage, or disposal operations are being or have been conducted and which is not a closed portion (Mississippi Department of Environmental Quality (MDEQ), *Hazardous Waste Management Regulations*, Section 264.S2(2)).
- *Airport* - a public-use airport open to the public without prior permission and without restrictions within the physical capacities of available facilities (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2(2)).
- *Aquifer* - a geological formation, group of formations, or portion of a formation capable of yielding significant quantities of groundwater to wells or springs (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2(2)).
- *Areas Susceptible to Mass Movement* - those areas of influence (i.e., areas characterized as having an active or substantial possibility of mass movement) where the movement of earth material at, beneath, or adjacent to the unit, because of slope stability or other natural or man-induced events, results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides and flows, soil function, block sliding, and rock fall (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2(2)).
- *Closed Portion* - that portion of a facility which has closed in accordance with the facility closure plan and all applicable closure requirements (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2 (2)).

- *Commercial Hazardous Waste Management Facility* - any facility engaged in the storage, treatment, recovery, or disposal of hazardous waste for a fee and which accepts hazardous waste from more than one generator (MDEQ, *Hazardous Waste Management Regulations*, Section 260).
- *Displacement* - the relative movement of any two sides of a fault measured in any direction (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2 (2)).
- *Facility* - all contiguous land, and structures, and other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (i.e., one or more landfills, surface impoundments, or combinations of them) (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2 (2)).
- *Fault* - a fracture or a zone of rock fractures in material along which strata on one side have been displaced with respect to those on the other side (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2(2)).
- *Holocene* - the most recent geologic epoch of the Quaternary Period, from the end of Pleistocene Epoch to the present (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2 (2)).
- *Incinerator* - any enclosed device that (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2(2)):
  1. uses controlled flame combustion and neither meets the criteria of classification as a boiler, sludge dryer, or carbon regeneration unit, nor is listed as an industrial furnace as these terms are defined in 40 CFR 260.10
  2. meets the definition of infrared incinerator or plasma arc incinerator established in 40 CFR 260.10.
- *Karst Terranes* - areas where karst topography, with its characteristic surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terrains include sinkholes, sinking streams, caves, large springs, and blind valleys (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2 (2)).
- *Lake or Reservoir* - a body of water, not owned by the applicant, having greater than 10 acres of surface area at such time as the spillway overflows, and the primary purpose of which is not for wastewater storage or treatment (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2(2)).
- *Land-Based Unit* - a unit subject to Mississippi Hazardous Waste Management Regulations Part 264, Subpart F, including landfills, surface impoundments, waste piles, land treatment units, and certain hazardous waste management units subject to Part 264, Subpart F. Land based unit also means a tank that closes under Mississippi Hazardous Waste Management Regulation 264.197(b), leaving contaminated soils in place (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2(2)).
- *Mass Movement* - any downslope unit movement of earth materials, including but not necessarily restricted to, landslides, avalanches, debris slides and flows, creep, solifluctions, backsliding, rock falls, and slump (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2(2)).
- *100-Year-Flood* - a flood that has 1 percent or greater chance of recurring in any given year or a flood of a magnitude equaled or exceeded once in 100 yr on the average over a significantly long period (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2(2)).
- *100-Year Floodplain* - any land area that is subject to a 1 percent or greater chance of flooding in any given year from any source (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2(2)).

- *Ordinary Waste* - putrescible, animal, and vegetable, wastes resulting from the handling, preparation, cooking, and consumption of food, including wastes from markets, storage facilities, handling, and sale of produce and other food products, and excepting materials that may be serviced by garbage grinders and handled as household sewage (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2(2)).
- *Outcrop* - that part of a geologic formation or structure that appears at the surface of the Earth; also, bedrock that is covered only by surficial deposits such as alluvium (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2(2)).
- *Poor Foundation Conditions* - those areas where features exist that indicate that a natural or man-induced event may result in inadequate foundation support for the structural components of a land-based or nonland-based unit (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2(2)).
- *Residential Area* - a group or cluster of 10 or more single family dwelling units on contiguous property and having an average density of two or more units per acre (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2(5.2)(c)).
- *Seismic Impact Zone* - an area with a 10 percent or greater probability that the maximum horizontal acceleration in lithified earth material will equal or exceed 0.10 g (expressed as a fraction of the earth's gravitational pull (g)) in 250 yr (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2(2)).
- *7Q10 Flow* - the average streamflow rate over 7 consecutive days that may be expected to be reached as an annual minimum no more frequently than 1 yr in ten (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2(2)).
- *Single Family Dwelling Unit* - either a conventional single family detached dwelling or mobile; or, a unit within a multi-family residential complex (townhouses, condominiums, or apartments) (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2 (5.2) (c)).
- *Stream or River* - a flowing body of water with a 7Q10 flow greater than zero (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2 (2)).
- *Structural Integrity* - the ability of a unit to withstand physical forces exerted upon designed components, ancillary devices, and containment structures of the unit (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2 (2)).
- *Surficial Deposit* - unconsolidated and residual, alluvial, or glacial deposits, lying on bedrock or occurring on or near the earth's surface (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2 (2)).
- *Unstable Area* - a location that is susceptible to natural or human-induced events or forces capable of impairing the structural integrity of a commercial hazardous waste management facility constructed at the location. Unstable areas can include areas exhibiting poor foundation conditions, areas susceptible to mass movement, and karst terrains (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2 (2)).
- *Water Well or Special Purpose Hole* - a well or hole including but not necessarily limited to, a potable well, agricultural well, monitoring well, observation well, saline or brackish water withdrawal well, contaminant recovery well, heat pump water supply hole, vertical closed-loop system hole, industrial supply well, or a rig supply well (MDEQ, *Hazardous Waste Management Regulations*, Section 264.S2(2)).

**HAZARDOUS WASTE MANAGEMENT  
GUIDANCE FOR MISSISSIPPI CHECKLIST USERS**

**REFER TO CHECKLIST ITEMS:**

Missing Checklist Items	HW.2.1.MS.
State-Specific Hazardous Waste Requirements	
Remediation of Uncontrolled Hazardous	[Moved to section O3.20.MS., June 1998]
Substance Sites	
All Sizes of Generators	HW.10.1.MS.
Transportation	HW.100.1.MS.
All TSDFs	HW.105.1.MS. through HW.105.7.MS.
Universal Wastes	
(NOTE: Mississippi has incorporated Federal universal waste regulations by reference.)	



<b>COMPLIANCE CATEGORY:</b> <b>HAZARDOUS WASTE MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>HW.2.</b></p> <p><b>MISSING CHECKLIST ITEMS</b></p> <p><b>HW.2.1.MS.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).</p>	<p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p>

<b>COMPLIANCE CATEGORY:</b> <b>HAZARDOUS WASTE MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>HW.10.</b></p> <p><b>ALL SIZES OF GENERATORS</b></p> <p><b>HW.10.1.MS.</b> Hazardous waste generators must meet specific reporting requirements (MDEQ, <i>Hazardous Waste Management Regulations</i>, Section 262.S1) [Revised June 1996].</p>	<p>Verify that hazardous waste generators that generate more than 220 lb of hazardous waste in any calendar year submit an annual report by 1 March of each calendar year that includes the type and amount of hazardous waste generated during the preceding calendar year.</p>

<b>COMPLIANCE CATEGORY:</b> <b>HAZARDOUS WASTE MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>HW.100.</b></p> <p><b>TRANSPORTATION</b></p> <p><b>HW.100.1.MS.</b> Hazardous waste transporters must meet specific reporting requirements (MDEQ, <i>Hazardous Waste Management Regulations</i>, Section 263.S1) [Added June 1996].</p>	<p>Verify that transporters of hazardous waste submit an annual report by 1 March of each calendar year that includes the transporter's location, mailing address, and contact person.</p>

<b>COMPLIANCE CATEGORY: HAZARDOUS WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>HW.105.</b></p> <p><b>ALL TSDFS</b></p> <p><b>HW.105.1.MS.</b> Commercial hazardous waste management facilities (see definitions) must meet specific location standards (MDEQ, <i>Hazardous Waste Management Regulations</i>, Sections 264.S2 (3.1), (3.2) (a) and (c), (3.3), (3.5), and (3.7)).</p> <p><b>HW.105.2.MS.</b> The location of commercial hazardous waste management facilities must meet specific environmental safety standards (MDEQ, <i>Hazardous Waste Management Regulations</i>, Sections 264.S2 (4.1) through (4.7)) [Revised July 1997].</p>	<p>Verify that the TSDF is not established or expanded in any of the following locations without prior approval from the Mississippi Environmental Quality Permit Board:</p> <ul style="list-style-type: none"> <li>- 100-yr floodplain</li> <li>- within 200 ft of any fault where displacement has occurred during the Holocene epoch</li> <li>- areas susceptible to damage caused by any ground shaking, liquefaction, or seismic wave motion</li> <li>- an unstable area.</li> </ul> <p>Verify that the TSDF is not established or expanded in a location where an active, inactive, or abandoned hydrocarbon well is present within or beneath the active portion of the facility.</p> <p>Verify that the TSDF is not established or expanded in a location where an active, inactive, or abandoned water well or other special purpose hole is present within or beneath the active portion of the facility without prior approval from the Mississippi Environmental Quality Permit Board.</p> <p>Verify that the TSDF is not established or expanded on any property where the TSDF does not own the mineral rights within the boundary of the proposed facility.</p> <p>(NOTE: Location standards apply to facilities that have submitted hazardous waste permit applications to the MDEQ after 1 April 1993 or still have permits pending as of 1 April 1993.)</p> <p>Verify that the TSDF is not established or expanded in the following locations:</p> <ul style="list-style-type: none"> <li>- in wetlands without approval from the U.S. Army Corps of Engineers</li> <li>- in coastal wetlands without approval from the Bureau of Marine Resources of the Mississippi Department of Wildlife, Fisheries, and Parks</li> <li>- in a manner that significantly and adversely impacts cultural resources listed in or eligible for listing in the National Register of Historic Places without prior approval</li> <li>- within 0.5 mi of a national, state, or city designated park or an outdoor recreational area owned by a city, county, or other public agency without written consent from the responsible managing agency</li> <li>- within national forest lands, national wilderness areas, or national wildlife refuge areas without approval from the managing Federal agency</li> </ul>

<b>COMPLIANCE CATEGORY:</b> <b>HAZARDOUS WASTE MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>HW.105.3.MS.</b> The location of commercial hazardous waste management facilities must meet specific local land use and proximity standards (MDEQ, <i>Hazardous Waste Management Regulations</i>, Sections 264.S2 (5.2), (5.3) (b), (5.4), (5.5), and (5.6)).</p>	<ul style="list-style-type: none"> <li>- within state wildlife management areas, state game management areas, or state natural areas as designated by the Mississippi Department of Wildlife, Fisheries, and Parks without approval from the managing state agency</li> <li>- in a manner that violates the statutes, rules, and regulations concerning protection of endangered or threatened species within the jurisdiction of the U. S. Fish and Wildlife Service and the Mississippi Department of Wildlife, Fisheries and Parks.</li> </ul> <p>Verify that the TSDF is not established or expanded where the active portion of the facility located within 0.5 mi. of the banks of any section of a river, stream, lake, or coastal waters is classified by the Commission on Environmental Quality as recreational or shellfish harvesting.</p> <p>Verify that the TSDF is not established or expanded with the active portion of the facility located closer than 500 ft from the banks of a stream, river, lake, reservoir, or coastal waters.</p> <p>Verify that when applying for a permit to establish or expand a commercial hazardous waste management facility that it complies with all State guidelines.</p> <p>(NOTE: Location standards apply to facilities that have submitted hazardous waste permit applications to the MDEQ after 1 April 1993 or still have permits pending as of 1 April 1993.)</p> <p>Verify that the TSDF meets the following location standards for the active portion of the facilities:</p> <ul style="list-style-type: none"> <li>- 1000 ft or more from any residence in existence on the date the permit application was submitted</li> <li>- 1 mi or more from a residential area in existence on the date of the permit application</li> <li>- if located in an established industrial park, 1000 ft or more from any residential area in existence on the date the permit application was submitted.</li> </ul> <p>Verify that the TSDF is not established or expanded with the active portion of the facility located within 1 mi from a public water supply surface water intake.</p> <p>(NOTE: Active portions of facilities must not be located within 20 mi from a public water supply surface water intake structure if the facility runoff enters the waterbody upgradient of the intake.)</p> <p>Verify that the location of the TSDF does not adversely affect operations or safety at any airport in existence on the date the permit application is submitted.</p> <p>Verify that the TSDF is not established or expanded with the active portion of the facility located within 1000 ft of any church existing on the date the permit</p>

<b>COMPLIANCE CATEGORY:</b> <b>HAZARDOUS WASTE MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>HW.105.4.MS.</b> The location of commercial hazardous waste management facilities must meet specific aesthetic standards (MDEQ, <i>Hazardous Waste Management Regulations</i>, Sections 264.S2 (7.1)).</p> <p><b>HW.105.5.MS.</b> Land-based commercial hazardous waste management units must meet specific location standards (MDEQ, <i>Hazardous Waste Management Regulations</i>, Sections 264.S2 (3.2) (b), (3.4), (3.6), (5.3) (a), and (5.7)).</p>	<p>application is submitted.</p> <p>Verify that, on the date that the permit application is submitted, the TSDF is not established or expanded with the active portion of the facility located within 1 mi of any existing hospital, nursing home, school, or other multi-occupant institution that provides services to immobile populations.</p> <p>(NOTE: Location standards apply to facilities that have submitted hazardous waste permit applications to the MDEQ after 1 April 1993 or still have permits pending as of 1 April 1993.)</p> <p>Verify that the active portion of a commercial hazardous waste management facility is located 1000 ft or more from a right-of-way edge of an interstate or primary highway as designated by the State Highway Commission on the date the permit application was submitted unless the facility meets one the following standards:</p> <ul style="list-style-type: none"> <li>- screened by natural objects, planting, fences or other appropriate means so that it is not visible</li> <li>- located within areas zoned for industrial use</li> <li>- facility location is approved by the State Highway Commission</li> <li>- the location is not visible from the main-traveled highway system.</li> </ul> <p>(NOTE: Location standards apply to facilities that have submitted hazardous waste permit applications to the MDEQ after 1 April 1993 or still have permits pending as of 1 April 1993.)</p> <p>Determine whether the TSDF has a land-based commercial hazardous waste management unit.</p> <p>Verify that the TSDF is not established or expanded on a seismic impact zone.</p> <p>Verify that the TSDF is established or expanded in an area that has geologic barrier material that meets the following standards:</p> <ul style="list-style-type: none"> <li>- at least 150 ft thick</li> <li>- the barrier's upper 50 ft has an average saturated hydraulic conductivity of <math>1 \times 10^{-7}</math> cm/s or less</li> <li>- the remainder of the geologic barrier has an average saturated hydraulic conductivity <math>1 \times 10^{-6}</math> cm/s or less.</li> </ul> <p>Verify that the TSDF is not established or expanded in outcrop areas of a:</p> <ul style="list-style-type: none"> <li>- sole source aquifer as designated by the USEPA</li> <li>- freshwater aquifer used as a present or potential source of water for a</li> </ul>

<b>COMPLIANCE CATEGORY:</b> <b>HAZARDOUS WASTE MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>HW.105.6.MS.</b> Commercial hazardous waste incinerators or landfills must meet specific standards (MDEQ, <i>Hazardous Waste Management Regulations</i>, Part 264.S2 (4.8), (5.7), and (5.8)).</p> <p><b>HW.105.7.MS.</b> TSDFs must meet specific reporting requirements (MDEQ, <i>Hazardous Waste Management Regulations</i>, Section 264.S1 and 265.S1) [Added June 1996].</p>	<p>community water system.</p> <p>Verify that the TSDF is not established or expanded with the active portion of the facility located within 1 mi of any well supplying water to a community water system.</p> <p>Verify that the TSDF is not established or expanded with the active portion of the facility located within 1/2 mi of the incorporated limits of any existing municipality that existed on the date the permit application was submitted.</p> <p>(NOTE: Location standards apply to facilities that have submitted hazardous waste permit applications to the MDEQ after 1 April 1993 or still have permits pending as of 1 April 1993.)</p> <p>Verify that commercial hazardous waste incinerators or landfills do not have a significant adverse impact on agriculture, aquaculture, forests, fish, or wildlife.</p> <p>Verify that commercial hazardous waste incinerators are not established or expanded with the active portion of the facility located within 1/2 mi of the incorporated limits of any existing municipality that existed on the date the permit application was submitted.</p> <p>Verify that the active portion of a commercial hazardous waste landfills are not established or expanded upon the same site or within 1000 ft of an existing or abandoned ordinary waste disposal site that existed on the date the permit application was submitted without prior approval from the MDEQ.</p> <p>Verify that hazardous waste TSDFs (including facilities that recycle hazardous waste) submit a report by 1 March of each calendar year that includes the types and amounts of hazardous waste treated, stored, recycled, and/or disposed during the preceding calendar year.</p> <p>(NOTE: This applies to permitted and interim status TSDFs alike.)</p>





## SECTION 5

### NATURAL RESOURCES MANAGEMENT

#### Mississippi Supplement, March 2010

This section covers the state requirements for Natural Resources Management and is intended to supplement the TEAM Guide. Refer to the TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

#### Definitions

- *Abutment* - that part of the undisturbed valley side or a constructed concrete wall against which the dam is constructed. Right and left abutments are identified from the perspective of an observer standing on the dam looking downstream (MDEQ, Office of Land and Water Resources, LW-4, I) [Added May 2005].
- *Alter or Repair* - any change in the surface or cross-section of existing dams and/or appurtenant works or any modification to appurtenant structures. Examples of alterations or repairs include such work as adding material to, or removing material from, the cross-section of a dam; changing the dimensions or elevations of a spillway; replacing pipe or in any other way altering a principal spillway; building a roadway on or across any part of a dam; burying pipelines; or in any way altering the approved operational features of a dam (MDEQ, Office of Land and Water Resources, LW-4, I) [Added May 2005].
- *Appurtenant Works* - this term includes, but is not limited to; spillways, either in the dam or separate there from; the reservoir and its rim or shoreline; low level outlet works; and water conduits such as tunnels, pipelines, or penstocks, either through the dam or its abutments (MDEQ, Office of Land and Water Resources, LW-4, I) [Added May 2005].
- *Coastal Wetland* - all publicly owned land subject to the ebb and flow of the tide; which are below the watermark of ordinary high tide; all publicly owned accretions above the watermark of ordinary high tide and publicly owned submerged water-bottoms below the watermark of ordinary high tide (Mississippi Code, Section 49-27-5(a)).
- *Dam* - any artificial barrier, including appurtenant works, constructed to impound or divert water, waste-water, or liquid borne materials, or solids that may flow if saturated. All structures necessary to maintain the water level in an impoundment or to divert a stream from its course will be considered one dam (MDEQ, Office of Land and Water Resources, LW-4, I) [Added May 2005].
- *Days* - calendar days including Saturdays, Sundays, and Holidays; unless specifically indicated otherwise in the body of this regulation (MDEQ, Office of Land and Water Resources, LW-4, I) [Added May 2005].
- *Department or MDEQ* - the Mississippi Department of Environmental Quality (MDEQ, Office of Land and Water Resources, LW-4, I) [Added May 2005].
- *Emergency Action Plan* - a formal written document identifying the area that would be inundated in the event of a dam failure and setting forth the plans and procedures for notifying the individuals, agencies, and public officials that would mobilize resources to respond to the emergency (MDEQ, Office of Land and Water Resources, LW-4, I) [Added May 2005].
- *Emergency* - this term includes, but is not limited to, uncontrolled breach of a dam; or any conditions leading to, or causing, a breach, overtopping, or any other condition in the dam and/or its appurtenant works that may lead to failure of the dam or otherwise pose a threat to life or property (MDEQ, Office of Land and Water Resources, LW-4, I) [Added May 2005].

- *Endangered Species* - any species or subspecies of wildlife whose prospects of survival or recruitment within the state are in jeopardy or are likely within the foreseeable future to become so, due to any of the following factors (Mississippi Code, Section 49-5-105) [Revised March 2009]:
  1. the destruction, drastic modification, or severe curtailment of its habitat
  2. its over-utilization for scientific, commercial, or sporting purposes
  3. the effect on it of disease, pollution, or predation
  4. other natural or manmade factors affecting its prospects of survival or recruitment within the state
  5. any combination of the foregoing factors.

The term shall also be deemed to include any species or subspecies of fish and wildlife appearing on the United States' List of Endangered Native Fish and Wildlife as it appears on July 1, 1974, (Part 17 of Title 50 of the Code of Federal Regulations, Appendix D) as well as any species or subspecies of fish and wildlife appearing on the United States' List of Endangered Foreign Fish and Wildlife (Part 17 of Title 50 of the Code of Federal Regulations, Appendix A), as such list may be modified hereafter.

- *Enlarge* - any change in, or addition to, an existing dam or reservoir, which raises, or may raise the water storage elevation or storage volume of the water, waste-water, or liquid-borne material impounded by the dam (MDEQ, Office of Land and Water Resources, LW-4, I) [Added May 2005].

This term also includes any species or subspecies of fish and wildlife appearing on the Federal List of Endangered Native Fish and Wildlife as it appears on 1 July 1974 (50 Code of Federal Regulations (CFR) 17, Appendix D), as well as any species or subspecies of fish and wildlife appearing on the Federal List of Endangered Fish and Wildlife (50 CFR 17, Appendix A), as such list may be modified hereafter.

- *High Hazard* - a class of dam in which failure may cause loss of life, serious damage to residential, industrial, or commercial buildings; or damage to, or disruption of, important public utilities or transportation facilities such as major highways or railroads. Dams proposed for construction in established or proposed residential, commercial, or industrial areas will be placed in this classification, unless the applicant provides convincing evidence to the contrary (MDEQ, Office of Land and Water Resources, LW-4, I) [Added May 2005].
- *Impoundment or Reservoir* - a man-made dammed, levied, or diked area or basin designed to store water or other liquids above surface levels that would occur under natural conditions (MDEQ, Office of Land and Water Resources, LW-4, I) [Added May 2005].
- *Low Hazard* - a class of dam in which failure would at the most result in damage to agricultural land, farm buildings (excluding residences), or minor roads (MDEQ, Office of Land and Water Resources, LW-4, I) [Added May 2005].

*Nongame Species* - any wild mammal, bird, amphibian, reptile, fish, mollusk, crustacean, or other wild animal not otherwise legally classified by statute or regulation of this state (Mississippi Code, Section 49-5-105).

- *Permit Board or Board* - the Mississippi Environmental Quality Permit Board (MDEQ, Office of Land and Water Resources, LW-4, I) [Added May 2005].
- *Person* - the state or other agency or institution thereof, any municipality, political subdivision, public or private corporation, individual, partnership, association or other entity, and including any officer or governing or managing body of any municipality, political subdivision, or public or private corporation, or the United States or any officer or employee thereof (MDEQ, Office of Land and Water Resources, LW-4, I) [Added May 2005].

*Take* - to harass, hunt, capture, or kill or attempt to harass, hunt, capture, or kill wildlife (Mississippi Code, Section 49-5-105).

- *Significant Hazard* - a class of dam in which failure poses no threat to life, but may cause significant damage to main roads, minor railroads, or cause interruption of use or service of public utilities (MDEQ, Office of Land and Water Resources, LW-4, I) [Added May 2005].

*Wildlife* - any wild mammal, bird, reptile, amphibian, fish, mollusk, crustacean, or other wild animal or any part, product, egg, or offspring, or the dead body or parts thereof (Mississippi Code, Section 49-5-105).

- *Written Authorization* - official written correspondence from the Board, or its designee, authorizing construction, enlargement, repair, or alteration of a dam; including any specified conditions or limitations under which the work is to be performed by the person to whom the approval is granted (MDEQ, Office of Land and Water Resources, LW-4, I) [Added May 2005].

NATURAL RESOURCES MANAGEMENT GUIDANCE FOR MISSISSIPPI CHECKLIST USERS	
REFER TO CHECKLIST ITEMS:	
Missing Checklist Items	NR.2.1.MS.
Dredging	NR.5.1.MS.
Water Resource Management	NR.15.1.MS. through NR.15.3.MS.
Wildlife	NR.20.1.MS. and NR.20.2.MS.

GUIDANCE FOR MISSISSIPPI APPENDIX USERS	
REFER TO APPENDIX NUMBERS:	REFER TO APPENDIX TITLES:
5-1	Mississippi Endangered Species

<b>COMPLIANCE CATEGORY:</b> <b>NATURAL RESOURCES MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>NR.2.</b></p> <p><b>MISSING CHECKLIST ITEMS</b></p> <p><b>NR.2.1.MS.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).</p>	<p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p>

<b>COMPLIANCE CATEGORY:</b> <b>NATURAL RESOURCES MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>NR.5.</b></p> <p><b>DREDGING</b></p> <p><b>NR.5.1.MS.</b> Projects that include the dredging or filling of wetlands require a permit (MDEQ, Mississippi Coastal Program, CP-8, Section III (K)) [Citation Revised May 1999; Citation Revised May 2006; Citation Revised March 2007].</p>	<p>Verify that when a project includes any of the following activities, a permit has been issued by the Department of Marine Resources:</p> <ul style="list-style-type: none"> <li>- the dredging, excavating or removal of soil, mud, sand, gravel, flora, fauna, or aggregate of any kind from any coastal wetland</li> <li>- the dumping filling or depositing of any soil, stones, sand, gravel, mud, aggregate of any kind or garbage, either directly or indirectly, on or in any coastal wetlands</li> <li>- killing or materially damaging any flora or fauna on or in any coastal wetland</li> <li>- the erection on coastal wetlands of structures which materially affect the ebb and flow of the tide</li> <li>- the erection of any structure or structures on suitable sites for water dependent industry.</li> </ul>

<b>COMPLIANCE CATEGORY: NATURAL RESOURCE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>NR.15.</b></p> <p><b>WATER RESOURCES MANAGEMENT</b></p> <p><b>NR.15.1.MS.</b> Dams must meet authorization and notification requirements (MDEQ, Office of Land and Water Resources, LW-4, Sections II and III) [Added May 2005].</p> <p><b>NR.15.2.MS.</b> Dams must meet general conditions of authorization (MDEQ, Office of Land and Water Resources, LW-4, Section V) [Added May 2005].</p>	<p>Verify that any person or entity proposing to construct, enlarge, repair, or alter a dam or reservoir submits an application to the Board, on forms prescribed by the Board, at least 30 days prior to the anticipated commencement of construction.</p> <p>Verify that any person or entity proposing to construct, enlarge, repair, or alter a dam or reservoir in the state of Mississippi obtains written authorization from the Permit Board, or its designee, prior to commencement of any site work related to the project.</p> <p>(NOTE: Prior written authorization is not required for emergency repairs to a dam that is in imminent danger of failing.)</p> <p>Verify that the dam owner reports emergency repairs to MDEQ by close of business on the next business day following the incident and file a written report with MDEQ within 5 days of the incident.</p> <p>(NOTE: Written construction authorization is not required for:</p> <ul style="list-style-type: none"> <li>- a peripheral dam or levee 8 feet or less in height, measured from the point of lowest elevation of its toe, regardless of the impounded storage volume</li> <li>- a dam that impounds 25 acre-feet or less at maximum storage volume</li> <li>- a dam that does not impound a watercourse with a continuous flow of water, as determined by the Commission.)</li> </ul> <p>Verify that any person or entity proposing to construct, enlarge, repair, or alter any dam or reservoir exempt from the requirement to obtain written authorization submits a notification of the planned project to MDEQ prior to the onset of construction.</p> <p>Verify that no materials is placed in a watercourse that will impede or block the natural flow of water without prior written authorization from the Permit Board and other appropriate federal, state, and local authorities.</p> <p>Verify that no impoundment is constructed that will adversely affect riparian or other beneficial water uses or plans for the proper utilization of state waters.</p> <p>(NOTE: The Commission may prescribe minimum flow releases from any dam or reservoir, as necessary, to protect downstream uses or otherwise prudently manage available surface water.)</p> <p>Verify that any dam that impounds a watercourse with a continuous flow is designed so that the established minimum flow for the stream (as established by</p>

<b>COMPLIANCE CATEGORY: NATURAL RESOURCE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>NR.15.3.MS.</b> Dams must meet inspection and reporting requirements (MDEQ, Office of Land and Water Resources, LW-4, Section VI) [Added May 2005].</p>	<p>the Commission) is maintained.</p> <p>Verify that the owner and/or any person responsible for the construction, enlargement, repair, or alteration of a dam on a watercourse lying, in whole or in part, within a levee district, first obtains permission for the work from the board of the levee district and provides proof of such permission with the application to the Board.</p> <p>Verify that owners of earthen dams establish and maintain a healthy turf on the exposed faces of the dam to prevent erosion, and mow frequently enough to prevent the encroachment of woody vegetation into the slopes of the dam embankment.</p> <p>Verify that owners of High Hazard or Significant Hazard dams prohibit livestock grazing on the dam in order to prevent damage to the turf and to prevent erosion associated with establishment of animal trails.</p> <p>(NOTE: In addition to the general conditions contained here, the Board may place special conditions on any authorization to construct or modify a dam.)</p> <p>Verify that, when water is impounded and stored behind a dam, the owner has a Surface Water Use Permit (see WQ.120.1.MS.)</p> <p>Verify that the owners or operators of high hazard or significant hazard dams maintain records and documents related to the original construction, recurring inspections, maintenance, repairs, and alterations of the dam for the life of the project.</p> <p>Verify that the owner and the operator of a dam assume responsibility for the proper operation and maintenance as well as the structural integrity of the dam.</p> <p>Verify that the owner and the operator inspect the dam at least every 60 days and after every major rainfall event over the watershed.</p> <p>Verify that the owner or operator of a high hazard or significant hazard dam have the dam inspected annually by a registered professional engineer with experience in the design and construction of dams.</p> <p>(NOTE: In order for Commission staff to schedule and manage resources to effectively monitor inspections and review submittals, these annual inspections of high hazard and significant hazard dams shall be completed according to the following timetable: for dams located in the northern district of the state, as identified in Figure 1., not later than the last day of April each year; for dams located in the central district, not later than the last day of August each year; and for dams located in the southern district, not later than the last day of December each year.)</p> <p>Verify that a report on findings of the annual inspection (including the completed</p>



<b>COMPLIANCE CATEGORY:</b> <b>NATURAL RESOURCE MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
	Board prescribed checklist and an evaluation of the operation, maintenance, and the structural integrity of the dam), bearing the signature and seal of the professional engineer performing the inspection, is submitted to the Board within 60 days after completion of the inspection.

<b>COMPLIANCE CATEGORY:</b> <b>NATURAL RESOURCES MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>NR.20.</b></p> <p><b>WILDLIFE</b></p> <p><b>NR.20.1.MS.</b> The taking, transport, processing, or sale of endangered species is prohibited (Mississippi Code 49-5-109(c) and 49-5-111 (d)) [Revised March 2007].</p> <p><b>NR.20.2.MS.</b> Facilities that have an agreement with the State Game and Fish Commission must meet specific management standards for nongame and endangered wildlife (Mississippi Code 49-5-111(b)) [Revised May 2004; Citation Revised March 2007].</p>	<p>Verify that persons on the facility do not take, possess, transport, export, possess, sell or offer for sale, or ship any species listed as endangered (see Appendix 5-1 for a list of endangered species).</p> <p>(NOTE: Permits may be granted for the taking, possession, transportation, exportation, or shipment of endangered species for scientific, zoological or educational purposes, for the propagation in captivity of such wildlife, or for other special purposes.)</p> <p>Determine whether the facility has entered into an agreement with Mississippi State Game and Fish Commission for the management of nongame or endangered wildlife.</p> <p>Verify that the facility meets the conditions of the agreement.</p>

## Appendix 5-1

### Mississippi Endangered Species

(Source: MISSISSIPPI'S COMPREHENSIVE WILDLIFE CONSERVATION STRATEGY 2005-2005, November 2005 Appendix VIII, [http://www.mdwfp.com/homelinks/more/Final/Appendix percent208.pdf](http://www.mdwfp.com/homelinks/more/Final/Appendix%20percent208.pdf)) [Revised July 1997; Revised March 2007]

SCIENTIFIC NAME	COMMON NAME	UEGCP*	EGCP*	MSRAP*	NGM*	TIER**
<b>Amphibians</b>						
<i>Ambystoma tigrinum</i>	Tiger Salamander	Yes				4
<i>Amphiuma pholeter</i>	One-Toed Amphiuma		Yes			1
<i>Aneides aeneus</i>	Green Salamander	Yes				2
<i>Bufo nebulifer</i>	Gulf Coast Toad	Yes	Yes	Yes	Yes	3
<i>Cryptobranchus alleganiensis</i>	Hellbender	Yes				1
<i>Eurycea lucifuga</i>	Cave Salamander	Yes				2
<i>Gyrinophilus porphyriticus</i>	Spring Salamander	Yes				2
<i>Hemidactyfum scutatum</i>	Four-Toed Salamander	Yes	Yes			2
<i>Pfethodon ainsworthi</i>	Baysprings Salamander		Yes			4
<i>Plethodon ventralis</i>	Southern Zigzag Salamander	Yes				2
<i>Plethodon websteri</i>	Webster's Salamander	Yes				2
<i>Pseudacris brachyphona</i>	Mountain Chorus Frog	Yes				3
<i>Pseudacris ornata</i>	Ornate Chorus Frog		Yes			2
<i>Pseudotriton montanus</i>	Mud Salamander		Yes			2
<i>Pseudotriton ruber</i>	Red Salamander	Yes	Yes			3
<i>Rana areolata</i>	Crawfish Frog	Yes				2
<i>Rana heckscheri</i>	River Frog		Yes			1
<i>Rana sevosa</i>	Mississippi Gopher Frog		Yes			1
<b>Birds</b>						
<i>Aimophila aestivalis</i>	Bachman's Sparrow	Yes	Yes			2
<i>Ammodramus henslowii</i>	Henslow's Sparrow		Yes			2
<i>Ammodramus leconteii</i>	Le Conte's Sparrow	Yes	Yes	Yes		2
<i>Ammodramus maritimus</i>	Seaside Sparrow		Yes		Yes	2
<i>Ammodramus nelsoni</i>	Nelson's Sharp-Tailed Sparrow		Yes		Yes	2
<i>Ammodramus savannarum</i>	Grasshopper Sparrow	Yes	Yes	Yes		2
<i>Anas acuta</i>	Northern Pintail	Yes	Yes	Yes	Yes	3
<i>Anas fulvigula</i>	Mottled Duck		Yes		Yes	2
<i>Anas rubripes</i>	American Black Duck	Yes	Yes	Yes	Yes	3
<i>Anhinga anhinga</i>	Anhinga	Yes	Yes	Yes		3
<i>Asio flammeus</i>	Short-Eared Owl	Yes	Yes	Yes	Yes	2
<i>Aythya affinis</i>	Lesser Scaup	Yes	Yes	Yes	Yes	3
<i>Botaurus lentiginosus</i>	American Bittern	Yes	Yes	Yes	Yes	3
<i>Calidris alpina</i>	Dunlin	Yes	Yes	Yes	Yes	3
<i>Calidris canutus</i>	Red Knot		Yes		Yes	2
<i>Calidris mauri</i>	Western Sandpiper	Yes	Yes	Yes	Yes	3
<i>Campephilus principalis</i>	Ivory-Billed Woodpecker	Yes	Yes	Yes		4
<i>Caprimulgus carolinensis</i>	Chuck-Will's-Widow	Yes	Yes	Yes	Yes	3
<i>Charadrius alexandrinus tenuirostris</i>	Southeastern Snowy Plover		Yes		Yes	1
<i>Charadrius melodus</i>	Piping Plover	Yes	Yes	Yes	Yes	2
<i>Charadrius wilsonia</i>	Wilson's Plover		Yes		Yes	1
<i>Colinus virginianus</i>	Northern Bobwhite	Yes	Yes	Yes		3
<i>Columbina passerina</i>	Common Ground-Dove	Yes	Yes	Yes		2
<i>Coturnicops noveboracensis</i>	Yellow Rail	Yes	Yes		Yes	1
<i>Dendroica cerulea</i>	Cerulean Warbler	Yes	Yes		Yes	2

SCIENTIFIC NAME	COMMON NAME	UEGCP*	EGCP*	MSRAP*	NGM*	TIER**
<i>Dendroica discolor</i>	Prairie Warbler	Yes	Yes	Yes	Yes	3
<i>Egretta caerulea</i>	Little Blue Heron	Yes	Yes	Yes	Yes	2
<i>Egretta rufescens</i>	Reddish Egret		Yes		Yes	2
<i>Egretta rufescens</i>	Reddish Egret		Yes		Yes	2
<i>EgreNa thula</i>	Snowy Egret	Yes	Yes	Yes	Yes	3
<i>EgreNa tricolor</i>	Tricolored Heron	Yes	Yes	Yes	Yes	3
<i>Elanoides forficatus</i>	Swallow-Tailed Kite	Yes	Yes	Yes		2
<i>Eudocimus albus</i>	White Ibis	Yes	Yes	Yes	Yes	2
<i>Euphagus carolinus</i>	Rusty Blackbird	Yes	Yes	Yes		2
<i>Falco sparverius paulus</i>	Southeastern American Kestrel		Yes			1
<i>Grus canadensis pulla</i>	Mississippi Sandhill Crane		Yes			1
<i>Haematopus palliatus</i>	American Oystercatcher		Yes		Yes	1
<i>Haliaeetus leucocephalus</i>	Bald Eagle	Yes	Yes	Yes	Yes	2
<i>Helmitheros vermivorus</i>	Worm-Eating Warbler	Yes	Yes	Yes	Yes	3
<i>Hylocichla mustelina</i>	Wood Thrush	Yes	Yes	Yes	Yes	3
<i>Ixobrychus exilis</i>	Least Bittern	Yes	Yes	Yes	Yes	3
<i>Lanius ludovicianus</i>	Loggerhead Shrike	Yes	Yes	Yes		3
<i>Laterallus jamaicensis</i>	Black Rail	Yes	Yes		Yes	1
<i>Limnithlypis swainsonii</i>	Swainson's Warbler	Yes	Yes	Yes	Yes	2
<i>Limosa fedoa</i>	Marbled Godwit		Yes		Yes	2
<i>Me/anerpes erythrocephalus</i>	Red-Headed Woodpecker	Yes	Yes	Yes		3
<i>Mycteria americana</i>	Wood Stork	Yes	Yes	Yes		2
<i>Nycticorax nycticorax</i>	Black-Crowned Night-Heron	Yes	Yes	Yes	Yes	3
<i>Nycticorax violaceus</i>	Yellow-Crowned Night-Heron	Yes	Yes	Yes	Yes	3
<i>Oporornis formosus</i>	Kentucky Warbler	Yes	Yes	Yes	Yes	3
<i>Pandion haliaetus</i>	Osprey	Yes	Yes	Yes	Yes	3
<i>Passerina ciris</i>	Painted Bunting	Yes	Yes	Yes	Yes	2
<i>Pelecanus erythrorhynchos</i>	American White Pelican	Yes	Yes	Yes	Yes	3
<i>Pelecanus occidentalis</i>	Brown Pelican		Yes		Yes	2
<i>Picoides borealis</i>	Red-Cockaded Woodpecker	Yes	Yes			2
<i>Piranga olivacea</i>	Scarlet Tanager	Yes	Yes	Yes	Yes	3
<i>Porphyrola martinica</i>	Purple Gallinule	Yes	Yes	Yes	Yes	3
<i>Protonotaria citrea</i>	Prothonotary Warbler	Yes	Yes	Yes	Yes	3
<i>Rallus elegans</i>	King Rail	Yes	Yes	Yes	Yes	2
<i>Rynchops niger</i>	Black Skimmer	Yes	Yes		Yes	2
<i>Scolopax minor</i>	American Woodcock	Yes	Yes	Yes	Yes	3
<i>Seiurus motacilla</i>	Louisiana Waterthrush	Yes	Yes	Yes	Yes	3
<i>Sitta pusilla</i>	Brown-Headed Nuthatch	Yes	Yes	Yes		3
<i>Sterna antillarum</i>	Least Tern	Yes	Yes		Yes	2
<i>Sterna antillarum athalassos</i>	Interior Least Tern			Yes		2
<i>Sterna maxima</i>	Royal Tern		Yes		Yes	2
<i>Sterna nilotica</i>	Gull-Billed Tern	Yes	Yes		Yes	2
<i>Sterna sandvicensis</i>	Sandwich Tern		Yes		Yes	2
<i>Thryomanes bewickii</i>	Bewick's Wren	Yes	Yes	Yes		1
<i>Tyto alba</i>	Common Barn-Owl	Yes	Yes	Yes		3
<i>Vermivora bachmanii</i>	Bachman's Warbler		Yes		Yes	4
<b>Crustaceans</b>						
<i>Cambarellus diminutus</i>	Least Crayfish		Yes			2
<i>Cambarellus lesliei</i>	A Crayfish		Yes			2
<i>Cambarus girardianus</i>	A Crayfish	Yes				3
<i>Cambarus latimanus</i>	A Crayfish	Yes				2
<i>Fallicambarus burrisi</i>	Burris' Burrowing Crawfish		Yes			1
<i>Fallicambarus byersi</i>	Lavender Burrowing Crayfish		Yes			2
<i>Fallicambarus danielae</i>	Speckled Burrowing Crayfish		Yes			1

SCIENTIFIC NAME	COMMON NAME	UEGCP*	EGCP*	MSRAP*	NGM*	TIER**
<i>Fallicambarus gordonii</i>	Camp Shelby Burrowing Crawfish		Yes			1
<i>Hobbseusa Nenuatus</i>	Pearl Rivulet Crayfish	Yes				1
<i>Hobbseus cristatus</i>	A Crayfish	Yes				1
<i>Hobbseus orconectoides</i>	Oktibbeha Rivulet Crayfish	Yes				1
<i>Hobbseus petilus</i>	Tombigbee Rivulet Crayfish	Yes				1
<i>Hobbseus prominens</i>	A Crayfish	Yes				2
<i>Hobbseus val/eculus</i>	Choctaw Rivulet Crayfish	Yes				1
<i>Hobbseus yalobushensis</i>	A Crayfish	Yes				1
<i>Oreonectes etnieri</i>	A Crayfish	Yes				2
<i>Oreonectes hartfieldi</i>	A Crayfish		Yes			1
<i>Oreonectes jonesi</i>	A Crayfish		Yes			2
<i>Oreoneetes mississippiensis</i>	A Crayfish	Yes				1
<i>Oreoneetes validus</i>	A Crayfish	Yes				3
<i>Proeambarus ablusus</i>	A Crayfish	Yes				2
<i>Proeambarus barbiger</i>	Jackson Prairie Crayfish	Yes	Yes			1
<i>Proeambarus bivittatus</i>	Ribbon Crayfish		Yes			2
<i>Proeambarus cometes</i>	Mississippi Flatwoods Crayfish	Yes				1
<i>Proeambarus eonnus</i>	Carrollton Crayfish	Yes				1
<i>Proeambarus elegans</i>	A Crayfish	Yes				2
<i>Proeambarus fitzpatricki</i>	Spiny-Tailed Crayfish		Yes			1
<i>Proeambarus hagenianus</i>	A Crayfish	Yes				2
<i>Proeambarus vestieps</i>	Lagniappe Crayfish	Yes				1
<i>Proeambarus lecontei</i>	Mobile Crayfish		Yes			2
<i>Proeambarus lylei</i>	Shutispear Crayfish	Yes				1
<i>Proeambarus penni</i>	Pearl Blackwater Crayfish		Yes			2
<i>Proeambarus pogum</i>	Bearded Red Crayfish	Yes				1
<i>Proeambarus shermani</i>	A Crayfish		Yes			3
<b>Fishes</b>						
<i>Aeipenser oxyrinchus desotoi</i>	Gulf Sturgeon	Yes	Yes		Yes	1
<i>Alosa alabamae</i>	Alabama Shad	Yes	Yes		Yes	1
<i>Ambloplites rupestris</i>	Rock Bass	Yes				4
<i>Ammoerypta clara</i>	Western Sand Darter	Yes				4
<i>Ammoerypta meridiana</i>	Southern Sand Darter	Yes				2
<i>Atraetosteus spatula</i>	Alligator Gar	Yes	Yes	Yes	Yes	3
<i>Clinostomus funduloides</i>	Rosyside Dace	Yes				3
<i>Cottus caroliniae</i>	Banded Sculpin	Yes				2
<i>Crystallaria asprella</i>	Crystal Darter	Yes	Yes			1
<i>Cyaleptus elongatus</i>	Blue Sucker	Yes	Yes	Yes		2
<i>Cyaleptus meridionalis</i>	Southeastern Blue Sucker	Yes	Yes			2
<i>Cyprinella eallistia</i>	Alabama Shiner	Yes				2
<i>Cyprinella galaetura</i>	Whitetail Shiner	Yes				2
<i>Cyprinella spiloptera</i>	Spottin Shiner	Yes				3
<i>Cyprinella whipplei</i>	Steelcolor Shiner	Yes	Yes			2
<i>Enneaeanthus gloriosus</i>	Bluespotted Sunfish	Yes	Yes		Yes	3
<i>Etheostoma asprigene</i>	Mud Darter	Yes	Yes	Yes		3
<i>Etheostoma blennioides</i>	Greenside Darter	Yes				2
<i>Etheostoma duryi</i>	Black Darter	Yes				2
<i>Etheostoma flabel/are</i>	Fantail Darter	Yes				3
<i>Etheostoma kennicotti</i>	Stripetail Darter	Yes				2
<i>Etheostoma laehneri</i>	Tombigbee Darter	Yes				2
<i>Etheostoma nigripinne</i>	Blackfin Darter	Yes				2
<i>Etheostoma raneyi</i>	Yazoo Darter	Yes				1
<i>Etheostoma rubrum</i>	Bayou Darter		Yes			1

SCIENTIFIC NAME	COMMON NAME	UEGCP*	EGCP*	MSRAP*	NGM*	TIER**
<i>Etheostoma rufilineatum</i>	Redline Darter	Yes				3
<i>Etheostoma rupestre</i>	Rock Darter	Yes				3
<i>Etheostoma zonifer</i>	Backwater Darter	Yes				1
<i>Etheostoma zonistium</i>	Bandfin Darter	Yes				2
<i>Fundulus dispar</i>	Northern Starhead Topminnow	Yes	Yes	Yes	Yes	2
<i>Fundulus euryzonus</i>	Broadstripe Topminnow		Yes			2
<i>Fundulus jenkinsi</i>	Saltmarsh Topminnow		Yes		Yes	2
<i>Heterandria formosa</i>	Least Killifish		Yes		Yes	3
<i>Hypentelium etowanum</i>	Alabama Hog Sucker	Yes				3
<i>lethomyzon eastaneus</i>	Chestnut Lamprey	Yes	Yes	Yes		2
<i>letobus niger</i>	Black Buffalo	Yes	Yes	Yes		3
<i>Leptolucania ommata</i>	Pygmy Killifish		Yes		Yes	4
<i>Lythrurus fasciolaris</i>	Rosefin Shiner	Yes				3
<i>Macrhybopsis gelida</i>	Sturgeon Chub			Yes		4
<i>Macrhybopsis meeki</i>	Sicklefin Chub			Yes		4
<i>Morone saxatilis</i>	Striped Bass	Yes	Yes	Yes	Yes	2
<i>Moxostoma anisurum</i>	Silver Redhorse	Yes				2
<i>Moxostoma carinatum</i>	River Redhorse	Yes	Yes			2
<i>Moxostoma duquesnei</i>	Black Redhorse	Yes				2
<i>Moxostoma erythrurum</i>	Golden Redhorse	Yes	Yes			3
<i>Moxostoma macrolepidotum</i>	Shorthead Redhorse	Yes				2
<i>Notropis amnis</i>	Pallid Shiner	Yes				2
<i>Notropis boops</i>	Bigeye Shiner	Yes				2
<i>Notropis candidus</i>	Silverside Shiner	Yes				2
<i>Notropis chalybaeus</i>	Ironcolor Shiner		Yes	Yes		1
<i>Notropis edwardraneyi</i>	Fluvial Shiner	Yes				2
<i>Notropis melanostomus</i>	Blackmouth Shiner	Yes	Yes			1
<i>Notropis micropteryx</i>	Rosyface Shiner	Yes				2
<i>Notropis sabinae</i>	Sabine Shiner	Yes				3
<i>Noturus exilis</i>	Slender Madtom	Yes				4
<i>Noturus flavus</i>	Stonecat			Yes		2
<i>Noturus munitus</i>	Frecklebelly Madtom	Yes	Yes			1
<i>Noturus gladiator</i>	Piebald Madtom	Yes				1
<i>Percina aurora</i>	Pearl Darter	Yes	Yes			1
<i>Percina evides</i>	Gilt Darter	Yes				2
<i>Percina kathae</i>	Mobile Logperch	Yes				3
<i>Percina lenticula</i>	Freckled Darter	Yes	Yes			1
<i>Percina phoxocephala</i>	Slenderhead Darter	Yes				2
<i>Phenacobius mirabifis</i>	Suckermouth Minnow	Yes				2
<i>Phoxinus erythrogaster</i>	Southern Redbelly Dace	Yes		Yes		2
<i>Platygobio gracilis</i>	Flathead q.ub			Yes		4
<i>Polyodon spathula</i>	Paddlefish	Yes	Yes	Yes		3
<i>Pteronotropsis welaka</i>	Bluenose Shiner		Yes			2
<i>Rhinichthys atratulus</i>	Blacknose Dace	Yes				2
<i>Scaphirhynchus albus</i>	Pallid Sturgeon			Yes		1
<i>Scaphirhynchus suttkusi</i>	Alabama Sturgeon	Yes				1
<i>Stizostedion canadense</i>	Sauger	Yes	Yes	Yes		3
<i>Stizostedion sp 1</i>	Southern Walleye	Yes	Yes	Yes		2
<i>Stizostedion vitreum</i>	Walleye	Yes	Yes			3
<b>Mammals</b>						
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-Eared Bat	Yes	Yes	Yes		2
<i>Lasionycteris noctivagans .</i>	Silver-Haired Bat	Yes				4
<i>Lasiurus cinereus</i>	Hoary Bat	Yes		Yes		2
<i>Lasiurus intermedius</i>	Northern Yellow Bat		Yes			2
<i>Mustela frenata</i>	Long-Tailed Weasel	Yes	Yes			3

SCIENTIFIC NAME	COMMON NAME	UEGCP*	EGCP*	MSRAP*	NGM*	TIER**
<i>Myotis austroriparius</i>	Southeastern Myotis	Yes	Yes	Yes		1
<i>Myotis grisescens</i>	Gray Myotis	Yes	Yes			2
<i>Myotis lucifugus</i>	Little Brown Myotis		Yes			2
<i>Myotis septentrionalis</i>	Northern Myotis	Yes				2
<i>Myotis sodalis</i>	Indiana Or Social Myotis	Yes				4
<i>Peromyscus polionotus</i>	Oldfield Mouse	Yes	Yes	Yes		2
<i>Puma concolor coryi</i>	Florida Panther	Yes	Yes	Yes		4
<i>Spilogale putorius</i>	Eastern Spotted Skunk	Yes				2
<i>Trichechus manatus</i>	Manatee		Yes		Yes	2
<i>Ursus americanus</i>	Black Bear	Yes				2
<i>Ursus americanus luteolus</i>	Louisiana Black Bear	Yes	Yes	Yes		1
<i>Zapus hudsonius</i>	Meadow Jumping Mouse	Yes				2
<b>Mussels</b>						
<i>Actinonaias ligamentina</i>	Mucket			Yes		1
<i>Anodontoides radiatus</i>	Rayed Creeks hell		Yes			2
<i>Arcidens confragosus</i>	Rock Pocketbook	Yes		Yes		2
<i>Cyclonaias tuberculata</i>	Purple Wartyback	Yes				1
<i>Cyprogenia aberti</i>	Western Fanshell			Yes		4
<i>Ellipsaria lineolata</i>	Butterfly	Yes		Yes		2
<i>Elliptio arca</i>	Alabama Spike	Yes	Yes			1
<i>Elliptio arctata</i>	Delicate Spike	Yes	Yes			1
<i>Elliptio di/atata</i>	Spike	Yes		Yes		1
<i>Epioblasma brevidens</i>	Curnberlandian Combs hell	Yes				1
<i>Epioblasma penita</i>	Southern Combshell	Yes				1
<i>Epioblasma triquetra</i>	Snuffbox	Yes				1
<i>Fusconaia bamesiana</i>	Tennessee Pigtoe	Yes				1
<i>Lampsilis cardium</i>	Plain Pocketbook	Yes	Yes			2
<i>Lampsilis hydiana</i>	Louisiana Fatmucket		Yes			1
<i>Lampsilis perovalis</i>	Orange-Nacre Mucket	Yes				1
<i>Lampsilis siliquioidea</i>	Fatmucket			Yes		3
<i>Lampsilis straminea straminea</i>	Rough Fatmucket	Yes				2
<i>Lasmigona complanata alabamensis</i>	Alabama Heelsplitter	Yes				1
<i>Lasmigona comp/anata</i>	White Heelsplitter	Yes	Yes			3
<i>Lexingtonia do/abel/oides</i>	Siabside Pearlymussel	Yes				1
<i>Ligumia recta</i>	Black Sandshell	Yes	Yes			1
<i>Medionidus acutissimus</i>	Alabama Moccasinshell	Yes				1
<i>Medionidus mcg/ameriae</i>	Tornbigbee Moccasinshell	Yes				4
<i>Obovaria jacksoniana</i>	Southern Hickorynut	Yes	Yes			1
<i>Obovaria unicolor</i>	Alabama Hickorynut	Yes	Yes			1
<i>Plethobasus cyphus</i>	Sheepnose			Yes		1
<i>Pleurobema bead/eianum</i>	Mississippi Pig toe	Yes	Yes			2
<i>Pleurobema curtum</i>	Black Clubs hell	Yes				4
<i>Pleurobema decisum</i>	Southern Clubshelr	Yes				1
<i>Pleurobema marshalli</i>	Flat Pigtoe	Yes				4
<i>Pleurobema perovatum</i>	Ovate Clubshell	Yes				1
<i>Pleurobema rubrum</i>	Pyramid Pigtoe	Yes		Yes		1
<i>Pleurobema taitianum</i>	Heavy Pigtoe	Yes				4
<i>Potamilus alatus</i>	Pink Heelsplitter	Yes				3
<i>Potamilus capax</i>	Fat Pocketbook			Yes		1
<i>Potamilus inflatus</i>	Inflated Heelsplitter	Yes				4
<i>Ptychobranhus fasciolaris</i>	Kidneyshell	Yes				3
<i>Quadrula cylindrica cylindrica</i>	Rabbitsfoot	Yes		Yes		1
<i>Quadrula metanевра</i>	Monkeyface	Yes				4
<i>Quadrula nodu/ata</i>	Wartyback	Yes		Yes		2

SCIENTIFIC NAME	COMMON NAME	UEGCP*	EGCP*	MSRAP*	NGM*	TIER**
<i>Quadrula rumphiana</i>	Ridged Mapleleaf	Yes				2
<i>Quadrula stapes</i>	Stirrupshell	Yes				4
<i>Suophthusconnasaugaensis</i>	Alabama Creekmussel	Yes				1
<i>Suophthusubvexus</i>	Southern Creekmussel	Yes				2
<i>Strophitus undulatus</i>	Squawfoot	Yes	Yes			2
<i>Truncilla truncata</i>	Deertoe	Yes		Yes		3
<i>Uniomerus caroliniana</i>	Florida Pond horn		Yes			2
<i>Uniomerus declivis</i>	Tapered Pond horn	Yes	Yes	Yes		2
<b>Reptiles</b>						
<i>Caretta caretta</i>	Loggerhead; Cabezon		Yes		Yes	2
<i>Chelonia mydas</i>	Green Turtle		Yes		Yes	3
<i>Crotalus adamanteus</i>	Eastern Diamondback Rattlesnake		Yes			2
<i>Deirochelys reticularia miaria</i>	Western Chicken Turtle			Yes		3
<i>Dermochelys coriacea</i>	Leatherback; Tinglar		Yes		Yes	3
<i>Drymarchon couperi</i>	Eastern Indigo Snake		Yes			4
<i>Eretmochelys imbricata</i>	Hawksbill; Carey		Yes		Yes	4
<i>Eumeces anthracinus pluvialis</i>	Southern Coal Skink	Yes	Yes			2
<i>Farancia erythrogramma</i>	Rainbow Snake	Yes	Yes			2
<i>Gopherus polyphemus</i>	Gopher Tortoise	Yes	Yes			2
<i>Graptemys flavimaculata</i>	Yellow-Blotched Map Turtle		Yes			2
<i>Graptemys gibbonsi</i>	Pascagoula Map Turtle	Yes	Yes			2
<i>Graptemys nigrinoda</i>	Black-Knobbed Map Turtle	Yes				2
<i>Graptemys oculifera</i>	Ringed Map Turtle	Yes	Yes			2
<i>Graptemys pulchra</i>	Alabama Map Turtle	Yes				2
<i>Heterodon simus</i>	Southern Hognose Snake		Yes		Yes	4
<i>Lampropeltis calligaster</i>	Prairie Kingsnake			Yes		2
<i>Lampropeltis calligaster rhombomaculata</i>	Mole Kingsnake	Yes	Yes			2
<i>Lampropeltis getula nigra</i>	Black Kingsnake	Yes				3
<i>Lampropeltis triangulum sypila</i>	Red Milk Snake	Yes		Yes		2
<i>Lepidochelys kempii</i>	Kemp's or Atlantic Ridley		Yes		Yes	1
<i>Macrochelys temminckii</i>	Alligator Snapping Turtle	Yes	Yes	Yes	Yes	2
<i>Malaclemys teffapin pileata</i>	Mississippi Diamondback Terrapin		Yes		Yes	2
<i>Masticophis flagellum</i>	Eastern Coachwhip		Yes		Yes	3
<i>Micrurus fulvius</i>	Eastern Coral Snake		Yes			2
<i>Nerodia clarkii clarkii</i>	Gulf Salt Marsh Snake		Yes		Yes	2
<i>Ophisaurus attenuatus</i>	Slender Glass Lizard	Yes	Yes			2
<i>Ophisaurus mimicus</i>	Mimic Glass Lizard		Yes			1
<i>Pituophis melanoleucus lodingi</i>	Black Pine Snake		Yes			1
<i>Pituophis melanoleucus melanoleucus</i>	Northern Pine Snake	Yes				3
<i>Pseudemys alabamensis</i>	Alabama Redbelly Turtle		Yes		Yes	1
<i>Regina rigida deltae</i>	Delta Crayfish Snake		Yes			2
<i>Regina rigida sinicola</i>	Gulf Crayfish Snake		Yes			3
<i>Regina septemvittata</i>	Queen Snake	Yes	Yes			2
<i>Rhadinaea flavilata</i>	Pine Woods Snake		Yes		Yes	1

**\* ECOREGIONS OF MISSISSIPPI**

UEGCP = Upper East Gulf Coastal Plain Ecoregion

NGM = Northern Gulf of Mexico Ecoregion



**EGCP** = East Gulf Coastal Plain Ecoregion

**MSRAP** = Mississippi River Alluvial Plain Ecoregion

**\*\* TIER DESCRIPTIONS**

**Tier 1** - Species that are in need of immediate conservation action and/or research because of extreme rarity, restricted distribution, unknown or decreasing population trends, specialized habitat needs and/or habitat vulnerability. Some species may be considered critically imperiled and at risk of extinction/extirpation.

**Tier 2** - Species that are in need of timely conservation action and/or research because of rarity, restricted distribution, unknown or decreasing population trend, specialized habitat needs or habitat vulnerability or significant threats.

**Tier 3** - Species that are of less immediate conservation concern, but are in need of planning and effective management due to unknown or decreasing population trends, specialized habitat needs or habitat vulnerability.

**Tier 4** - Species listed as extirpated ITom Mississippi, of historical occurrence only, or accidental. While no conservation action or research is recommended at this time, these species remain a SGCN in the event that taxa may be rediscovered or reintroduced ITom populations existing outside the state.



## **SECTION 6**

### **OTHER ENVIRONMENTAL ISSUES**

#### **Mississippi Supplement, March 2010**

This section covers the state requirements for Other Environmental Issues and is intended to supplement the TEAM Guide. Refer to the TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

**OTHER ENVIRONMENTAL ISSUES  
GUIDANCE FOR MISSISSIPPI CHECKLIST USERS**

**REFER TO CHECKLIST ITEMS:**

The NEPA Process

Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

Missing Checklist Items O1.2.1.MS.

Environmental Noise

Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements

Missing Checklist Items O2.2.1.MS.

CERCLA Cleanup Sites

Missing Checklist Items O3.2.1.MS.

State Specific Requirements

Remediation of Uncontrolled Hazardous [Deleted March 2007]  
Substance Sites

Pollution Prevention

Refer to the U.S. TEAM Guide and the DOD Component Supplements for DOD and service-specific requirements.

Missing Checklist Items O4.2.1.MS.

Program Management

Refer to the U.S. TEAM Guide and the DOD Component Supplements for DOD and service-specific requirements.

<b>COMPLIANCE CATEGORY:</b> <b>OTHER ENVIRONMENTAL ISSUES</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>THE NEPA PROCESS</b>  <b>O1.2.</b> <b>Missing Checklist Items</b>  <b>O1.2.1.MS.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).	<p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p>

<b>COMPLIANCE CATEGORY:</b> <b>OTHER ENVIRONMENTAL ISSUES</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>ENVIRONMENTAL NOISE</b>  <b>O2.2.</b> <b>Missing Checklist Items</b>  <b>O2.2.1.MS.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).	<p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p>

<b>COMPLIANCE CATEGORY:</b> <b>OTHER ENVIRONMENTAL ISSUES</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>CERCLA CLEANUP SITES</b>  <b>O3.2.</b> <b>Missing Checklist Items</b>  <b>O3.2.1.MS.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).	<p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p>

<b>COMPLIANCE CATEGORY:</b> <b>OTHER ENVIRONMENTAL ISSUES</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>CERCLA CLEANUP SITES</b>  <b>O3.20.</b> <b>State-Specific Requirements</b>  <b>O3.20.1.MS.</b> [Deleted March 2007].	<p>(NOTE: Guidance for Remediation of Uncontrolled Hazardous Substance Sites in Mississippi has been replaced with HW-2, Regulations Governing Brownfield Voluntary Cleanup and Redevelopment in Mississippi. The Assessment &amp; Remediation Branches (I &amp; II) manage uncontrolled sites defined as a site, facility, plant, or location where hazardous substances, pollutants, or contaminants have been released into the environment and, due to existing regulations, there is no Federal program that can handle the problem. The Branches oversee planning and cleanup activities such as environmental assessments, remedial investigations, and feasibility studies performed by responsible parties at contaminated sites. In an effort to ensure consistency of cleanup, the Branches utilize the Brownfield Risk Evaluation Procedures. For more information, call 601-961-5318 or 601-961-5217.)</p>



<b>COMPLIANCE CATEGORY:</b> <b>OTHER ENVIRONMENTAL ISSUES</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>POLLUTION PREVENTION</b>  <b>O4.2.</b> <b>Missing Checklist Items</b>  <b>O4.2.1.MS.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).	<p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p>



## SECTION 7

### PESTICIDE MANAGEMENT

#### Mississippi Supplement, March 2010

This section covers the state requirements for Pesticide Management and is intended to supplement the TEAM Guide. Refer to the TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

#### Definitions

- *Aerial Application* - the practice of engaging in agricultural aircraft operations (Bureau of Plant Industry, Plant-1, Subchapter 2, 201.01) [Added March 2010].
- *Agricultural Aircraft Operation* - dispensing any pesticide, fertilizer or seed by aircraft (Bureau of Plant Industry, Plant-1, Subchapter 2, 201.01) [Added March 2010].
- *Aircraft* - any contrivance now known or hereafter invented that is used or designed for navigation of or flight in the air over land and water, and that is designed for or adaptable for use in agricultural aircraft operations (Bureau of Plant Industry, Plant-1, Subchapter 2, 201.01) [Added March 2010].
- *Applicator* - any person, as herein defined, who is licensed under this article to engage in agricultural aircraft operations, who may or may not be a pilot (Bureau of Plant Industry, Plant-1, Subchapter 2, 201.01) [Added March 2010].
- *Agricultural Substance* - any seed, fertilizer or pesticide that is used, applied, sprayed or administered by aircraft (Bureau of Plant Industry, Plant-1, Subchapter 2, 201.01) [Added March 2010].
- *Certification* - the recognition by a state (or Bureau) that a person is competent and thus authorized to use or supervise the use of restricted use pesticides (Mississippi Statutes, Title 69, Chapter 23, Section 107 and Chapter 9, Subchapter 1, 100) [Added March 2009].
- *Certified Applicator* - any person who is certified to use or supervise the use of any restricted use pesticide covered by this certification (Mississippi Statutes, Title 69, Chapter 23, Section 107) [Added May 1999; Citation Revised May 2006; Revised March 2009].
- *Certified Private Applicator* - any individual who has been found competent to purchase and use "restricted use" pesticides covered by his certification (Bureau of Plant Industry, Plant-1, Subchapter 2, 101.01) [Added March 2010].
- *Commercial Applicator* - certified applicator (whether or not he is a private applicator with respect to some uses) who uses or supervises the use of any pesticide which is classified for restricted use for any purpose or on any property other than as provided by the definition of "private applicator." (Mississippi Statutes, Title 69, Chapter 23, Section 107) [Added May 1999; Revised May 2006; Citation Revised March 2009].
- *Bureau* - the Bureau of Plant Industry, a division of the Mississippi Department of Agriculture and Commerce (Bureau of Plant Industry, Plant-1, Subchapter 2, 201.01) [Added March 2010].
- *Person* - any individual, partnership, association, corporation or organized group of persons, whether incorporated or not (Mississippi Statutes, Title 69, Chapter 23, Section 107 and Bureau of Plant Industry, Plant-1, Subchapter 2, 101.01) [Added March 2010].) [Added March 2009].

- *Pesticide* - any substance or mixture of substances intended for preventing, destroying, repelling, mitigating or attracting any pests; and shall also include adjuvants intended to enhance the effectiveness of pesticides; and any substance or mixture of substances intended for use as a plant regulator, defoliant or desiccant (Mississippi Statutes, Title 69, Chapter 23, Section 107 and Bureau of Plant Industry, Plant-1, Subchapter 2, 101.01 and 201.01) [Added March 2010].) [Added March 2009].
- *Pilot* - the operator of an aircraft used in agricultural aircraft operation; provided, however, a pilot may also be a person who is licensed as an applicator under the provisions of these regulations (Bureau of Plant Industry, Plant-1, Subchapter 2, 201.01) [Added March 2010].
- *Private Applicator* - a certified applicator who uses or supervises the use of any pesticide which is classified for restricted use for purposes of producing any agricultural commodity on property owned, rented or controlled by him or his employer or, if applied without compensation other than trading of personal services between producers of agricultural commodities, on the property of another person, subject to regulations adopted under authority granted by Sections 69-23-101 through 69-23-135 (Mississippi Statutes, Title 69, Chapter 23, Section 107) [Added March 2009].
- *Private Applicator* - mean a certified applicator who uses or supervises the use of any pesticide which is classified for restricted use for purposes of producing any agricultural commodity on property owned or rented by him or his employer or (if applied without compensation other than trading of personal services between producers of agricultural commodities) on the property of another person (Bureau of Plant Industry, Plant-1, Subchapter 2, 101.01) [Added March 2010].
- *Public Applicator* - any individual who applies restricted use pesticides as an employee of a state agency, municipal corporation, public utility, or other governmental agency. This term does not include employees who work under direct “on-the-job” supervision of a public applicator (Mississippi Statutes, Title 69, Chapter 23, Section 107) [Added March 2009].
- *Restricted Use Pesticide* - any pesticide classified for restricted use by EPA or by the commissioner (Mississippi Statutes, Title 69, Chapter 23, Section 107 (Bureau of Plant Industry, Plant-1, Subchapter 2, 101.01) [Added March 2010].) [Added March 2009].
- *Restricted-Use Pesticide* - any pesticide classified for restricted use by EPA or the commissioner. Any pesticide which is not classified for restricted use by January 1, 1976, will be deemed to be for general use. In order not to deprive the citizens of this state of the benefits derived from newly developed pesticides or uses which may be restricted by EPA after January 1, 1976, the commissioner may register such pesticides for restricted use if that is the only method by which they may be made available to the citizens of Mississippi (Mississippi Code Ann. 69-23-3) [Revised May 1999; Citation Revised May 2006; Revised March 2009].
- *State Restricted Pesticide Use* - any pesticide use which, when used as directed or in accordance with a widespread and commonly recognized practice, the commissioner determines subsequent to a hearing, requires additional restrictions for that use to protect the environment including man, lands, beneficial insects, animals, crops and wildlife, other than pests (Mississippi Statutes, Title 69, Chapter 23, Section 107) [Added March 2009].
- *Under the Direct Supervision of a Certified Applicator* - means, unless otherwise prescribed by its labeling, a pesticide which is to be applied by a competent person acting under the instructions and control of a certified applicator who is available if and when needed, even though such certified applicator is not physically present at the time and place the pesticide is applied (Mississippi Statutes, Title 69, Chapter 23, Section 107 and Bureau of Plant Industry, Plant-1, Subchapter 2, 101.01) [Added March 2010].) [Added March 2009].

- *Unreasonable Adverse Effects on the Environment* - any unreasonable risk to man or the environment, taking into account the economic, social and environmental costs and benefits of the use of any pesticide (Mississippi Statutes, Title 69, Chapter 23, Section 107) [Added March 2009].

**PESTICIDE MANAGEMENT  
GUIDANCE FOR MISSISSIPPI CHECKLIST USERS**

**REFER TO CHECKLIST ITEMS:**

Missing Checklist Items	PM.2.1.MS.
Pesticide Applicators	PM.5.1.MS. through PM.5.4.MS.
Pesticide Application	
Equipment	[Deleted]
Aerial	PM.25.1.MS. and PM25.1.MS.
Documentation	PM.40.1.MS. and PM.40.2.MS.
Storage, Mixing, Preparation	[Deleted]
Transportation	[Deleted]

<b>COMPLIANCE CATEGORY: PESTICIDE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>PM.2.</b></p> <p><b>MISSING CHECKLIST ITEMS</b></p> <p><b>PM.2.1.MS.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).</p>	<p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p>

<b>COMPLIANCE CATEGORY: PESTICIDE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>PM.5.</b></p> <p><b>PESTICIDE APPLICATORS</b></p> <p><b>PM.5.1.MS.</b> [Deleted March 2009].</p> <p><b>PM.5.2.MS.</b> Restricted use pesticide applicators must be certified or licensed by the Commissioner (Mississippi Statutes, Title 69, Chapter 23, Section 111(1) and Bureau of Plant Industry, Plant-1, Subchapter 2, 101, 110, and 201) [Citation Revised July 1997; Revised May 1999; Revised March 2010].</p> <p><b>PM.5.3.MS.</b> [Deleted May 1999].</p> <p><b>PM.5.4.MS.</b> [Deleted March 2009].</p>	<p>(NOTE: MDAC, Bureau of Plant Industry, PESTCON-1 is not available. See Mississippi Extension Service for additional information on pesticides.)</p> <p>Verify that no person engages in the application or use of any pesticide that is restricted by USEPA or the Commissioner without having been certified or licensed by the Commissioner.</p> <p>Verify that any person who uses or supervises the use of any restricted use pesticide for the purpose of producing an agricultural commodity on property owned or rented by him or his employer or (if applied without compensation other than trading of personal services between producers of agricultural commodities) on the property of another person is certified as a private applicator.</p> <p>(NOTE: The examination for certification may be waived if one of the following conditions are met:</p> <ul style="list-style-type: none"> <li>- the applicant is already certified in a state with standards equal to those of Mississippi</li> <li>- a federal employee presents a federal form stating that he or she is competent and certified under the governmental agency plan.)</li> </ul> <p>(NOTE: Regulation repealed.)</p> <p>(NOTE: See Mississippi Extension Service for additional information on pesticides.)</p>



<b>COMPLIANCE CATEGORY:</b> <b>PESTICIDE MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>PESTICIDE APPLICATION</b>  <b>PM.15. Equipment</b>  <b>PM.15.1.MS.</b> [Deleted March 2009].	          (NOTE: See Mississippi Extension Service for additional information on pesticides.)

<b>COMPLIANCE CATEGORY: PESTICIDE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>PESTICIDE APPLICATION</b></p> <p><b>PM.25. Aerial</b></p> <p><b>PM.25.1.MS.</b> The aerial application of pesticides must meet state-specific requirements (Mississippi Statutes, Title 69, Chapter 21, Section 7(1); and Title 69, Chapter 21, Section 113(1) Bureau of Plant Industry, Plant-1, Subchapter 2, 207) [Added May 1999; Citation Revised May 2007; Revised March 2009; Revised March 2010].</p> <p><b>PM.25.2.MS.</b> The aerial application of pesticides must meet recordkeeping requirements (Bureau of Plant Industry, Plant-1, Subchapter 2, 213) [Added March 2010].</p>	<p>Verify that no person engages in the application of hormone-type herbicides by aircraft within this state at any time without a license issued by the Commissioner of Agriculture and Commerce through his agent, the State Entomologist.</p> <p>Verify that no person engages in agricultural aircraft operations without an applicator's or pilot's license issued by the Agricultural Aviation Board of the State of Mississippi.</p> <p>Verify that any person who is a non-resident of Mississippi obtains an aerial applicator's license from the Department before operating as an applicator in Mississippi.</p> <p>(NOTE: The Bureau of Plant Industry, Plant-1, Subchapter 2, Regulations of Application of Hormone-Type Herbicide By Aircraft, includes regulations.)</p> <p>Verify that aerial applicators keep and maintain for 2 years all records of any applications of agriculture substances that contain the following information:</p> <ul style="list-style-type: none"> <li>- date the application was made</li> <li>- brand name of the agricultural substances applied and the rate of application (lb / acre; quarts / acre)</li> <li>- crop/site to which the application was made</li> <li>- target pest, if applicable</li> <li>- number of acres sprayed</li> <li>- location of site and owner</li> <li>- Wind direction and speed</li> <li>- name of pilot and N No. of aircraft</li> <li>- any accidents, aborted loads, or unusual circumstances or occurrences during the application</li> <li>- EPA registration number of pesticide being applied.</li> </ul> <p>Verify that, beginning with date of January 1, 2010, all aerial applicators utilize in each registered aircraft an on-board differentially corrected Global Positioning System (GPS) capable of electronically recording and post processing into hard copies flight information related to each application of glyphosate products.</p> <p>Verify that the information recorded includes the following data:</p> <ul style="list-style-type: none"> <li>- date and time of day of each application</li> </ul>

<b>COMPLIANCE CATEGORY:</b> <b>PESTICIDE MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
	<ul style="list-style-type: none"> <li>- swath width</li> <li>- physical location (latitude and longitude)</li> <li>- altitude</li> <li>- complete tracking of aircraft from take-off to landing</li> <li>- spray on/off delineation - coordinated on application map</li> <li>- job location/file name</li> <li>- aircraft registration number</li> <li>- pilot identification.</li> </ul>

<b>COMPLIANCE CATEGORY:</b> <b>PESTICIDE MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>PESTICIDE APPLICATION</b>  <b>PM.40. Documentation</b>  <b>PM.40.1.MS.</b> Pesticide applicators must meet specific recordkeeping requirements (Mississippi Statutes, Title 69, Chapter 21, Section 7(1); and Title 69, Chapter 21, Section 117) [Added May 1999; Citation Revised May 2006; Revised March 2007; Revised March 2009].  <b>PM.40.2.MS.</b> Private pesticide applicators must meet specific recordkeeping requirements (Bureau of Plant Industry, Plant-1, Subchapter 2, 104) [Added March 2010].	<p>Verify that commercial applicators maintain records with respect to the application of pesticides.</p> <p>(NOTE: Such relevant information as the commissioner may deem necessary and the length of time that these records shall be maintained may be specified by the commissioner, and upon request the licensee shall furnish a copy of such records.)</p> <p>(NOTE: See Mississippi Extension Service for additional information on pesticides.)</p> <p>Verify that private applicators keep complete and accurate records of all work performed for at least two years.</p> <p>Verify that the application records are available for examination by employees of the Bureau during reasonable business hours and include the following:</p> <ul style="list-style-type: none"> <li>- the brand or product name</li> <li>- the EPA registration number</li> <li>- total amount applied</li> <li>- the size of the area treated</li> <li>- the crop, commodity, stored product or site</li> <li>- the date of the application</li> <li>- the location of application.</li> </ul>

<b>COMPLIANCE CATEGORY:</b> <b>PESTICIDE MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>PM.45.</b></p> <p><b>STORAGE, MIXING AND PREPARATION</b></p> <p><b>PM.45.1.MS.</b> [Deleted March 2009].</p>	<p>(NOTE: See Mississippi Extension Service for additional information on pesticides.)</p>

<b>COMPLIANCE CATEGORY:</b> <b>PESTICIDE MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>PM.50.</b>  <b>TRANSPORTATION</b>  <b>PM.50.1.MS.</b> [Deleted March 2009].	(NOTE: See Mississippi Extension Service for additional information on pesticides.)

## **SECTION 8**

### **PETROLEUM, OIL, AND LUBRICANT (POL) MANAGEMENT**

#### **Mississippi Supplement, March 2010**

This section covers the state requirements for POL Management and is intended to supplement the TEAM Guide. Refer to the TEAM Guide and the DOD Component Supplements for Federal, DOD, and service- specific requirements.

The State of Mississippi has adopted the Federal Regulations for handling of used oil. Refer to the TEAM Guide for these requirements.

Releases in excess of the reportable quantities listed in Appendix 3-1 (in TEAM Guide) must be reported to the Emergency Response Commission and the County.

<b>PETROLEUM, OIL, AND LUBRICANT (POL) MANAGEMENT GUIDANCE FOR MISSISSIPPI CHECKLIST USERS</b>	
<b>REFER TO CHECKLIST ITEMS:</b>	
Missing Checklist Items	PO.2.1.MS.



<b>COMPLIANCE CATEGORY:</b> <b>PETROLEUM, OIL, AND LUBRICANT (POL) MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>PO.2.</b></p> <p><b>MISSING CHECKLIST ITEMS</b></p> <p><b>PO.2.1.MS.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).</p>	<p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p>



## SECTION 9

### SOLID WASTE MANAGEMENT

#### Mississippi Supplement, March 2010

This section covers the state requirements for Solid Waste Management and is intended to supplement the TEAM Guide. Refer to the TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

#### Definitions

- *Active Life* - the period of operation beginning with the initial receipt of solid waste and ending at completion of closure activities in accordance with these regulations (Mississippi Department of Environmental Quality (MDEQ), Office of Pollution Control, SW-2 Nonhazardous Solid Waste Management Regulations (SW-2), Section I (C)) [Citation Revised May 2006].
- *Active Portion* - that part of a facility or unit that has received or is receiving waste and has not been closed in accordance with these regulations (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Airport* - a public-use airport open to the public without prior permission and without restrictions within the physical capacities of available facilities (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Application* - a written request to the Department for consideration of a by-product for a Beneficial Use Determination, submitted on forms provided by the Department with appropriate supporting documentation (MDEQ, Office of Pollution Control, SW-9 Beneficial Use of Nonhazardous Solid Waste (SW-9), Section I (C)) [Added May 2006].
- *Aquifer* - a geological formation, group of formations, or portion of a formation capable of yielding significant quantities of groundwater to wells or springs (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Areas Susceptible to Mass Movement* - those areas of influence (i.e., areas characterized as having an active or substantial possibility of mass movement) where the movement of earth material at, beneath, or adjacent to the landfill, because of natural or man-induced events, results in the downslope transfer of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides and flows, soil fluction, block sliding, and rock fall (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Backyard Composting* - the composting of organic solid waste, such as yard waste and household garbage, generated by a homeowner or tenant of a single or multi-family residential unit where such composting occurs at the site of the residence (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Beneficial Use* - the legitimate use of a solid waste in the manufacture of a product or as a product, for construction, soil amendment or other purposes, where the solid waste replaces a natural or other resource material by its utilization (MDEQ, SW-9, Section I (C)) [Added May 2006].
- *Beneficial Use Determination* - a written determination issued by the Mississippi Department of Environmental Quality to an applicant after review and approval of an application, to allow the legitimate beneficial use of a solid waste or by-product as a product (MDEQ, SW-9, Section I (C)) [Added May 2006].
- *Bird Hazard* - an increase in the likelihood of bird/aircraft collisions that may cause damage to the aircraft or injury to its occupants (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].

- *By-Product* - a solid waste material that is generated as a result of the manufacture of a primary product that, barring any form of alternate or beneficial use of that material, would otherwise be discarded at a landfill or other solid waste disposal facility (MDEQ, SW-9, Section I (C)) [Added May 2006].
- *Cation Exchange Capacity* - the sum of exchangeable cations a soil can absorb expressed in milliequivalents (meq) per 100 g of soil as determined by sampling the soil to the depth of cultivation or solid waste placement, whichever is greater, and analyzing by the summation method for distinctly acid soils or the sodium acetate method for neutral, calcareous, or saline soils (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Class I Compost* - compost made only from yard waste and/or other rubbish, which is mature or semimature, and is fine or coarse. For such compost the chemical quality is assumed to be good, and no analytical testing is required unless the Department has reason to believe that the quality of the compost may not be good. If the compost is semimature, the moisture content must be less than or equal to 60 percent (MDEQ, SW-2, Section IX (F) (2)) [Citation Revised May 2006].
- *Class II Compost* - compost made from sewage sludge, or from yard waste/rubbish mixed with sewage sludge, which is mature, fine, and has a good chemical quality (MDEQ, SW-2, Section IX (F)(2)) [Citation Revised May 2006].
- *Class III Compost* - compost made from household garbage or any other solid waste with similar properties or characteristics, which is mature, fine, and has good chemical quality (MDEQ, SW-2, Section IX (F)(2)) [Citation Revised May 2006].
- *Class IV Compost* - compost made from household garbage or any other solid waste with similar properties or characteristics, which is mature or semimature, fine or coarse, and has a good chemical quality. If the compost is semimature, the moisture content must be less than or equal to 60 percent (MDEQ, SW-2, Section IX (F) (2)) [Citation Revised May 2006].
- *Class V Compost* - compost made from any solid waste which is fresh or which has a poor chemical quality (MDEQ, SW-2, Section IX (F) (2)) [Citation Revised May 2006].
- *Class I Rubbish Site* - a rubbish site that receives all types of rubbish material (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Class II Rubbish Site* - a rubbish site that receives only those rubbish materials which are generally nonpolluting, inert waste materials, as determined by the Department (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Coastal Wetlands* - such areas as defined by and subject to the Coastal Wetlands Protection Act (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Commercial Nonhazardous Solid Waste Management Facility* - any facility engaged in the storage, treatment, processing, or disposal of nonhazardous solid waste from more than one generator not owned by the facility owner (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Commercial Solid Waste* - all types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential and industrial wastes (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Commercial Waste Incinerator* - an incinerator which burns solid waste received from more than one generator or for compensation, but excluding those which burn only wood or paper waste (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].

- *Commission* - the Mississippi Commission on Environmental Quality (MDEQ) (MDEQ, SW-2, Section I (C)). [Citation Revised May 2006].
- *Composite Liner* - a system consisting of two components; the upper component must consist of a minimum 30 mil flexible membrane liner (FML), and the lower component must consist of at least a 2 ft layer of compacted soil with a hydraulic conductivity of no more than  $1 \times 10^{-7}$  cm/s. FML components consisting of high density polyethylene (HDPE) must be at least 60 mil thick. The FML component must be installed in direct and uniform contact with the compacted soil component (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Compost* - the resulting product from a composting facility after having undergone biological decomposition, less residuals or recyclables. This product has been stabilized to a degree that is potentially beneficial to plant growth and is used or sold for use as a soil amendment, artificial topsoil, growing medium amendment, or other similar uses (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Composting Facility* - a facility which produces compost, excluding backyard composting or normal farming operations (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Composting or Compost Plant* - an officially controlled method or operation whereby putrescible solid wastes are broken down through microbic action to a material offering no hazard or nuisance factors to public health or well being (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Curing* - the final stage of the composting process beginning in the later part of the mesophilic stage. During the curing process, oxygen demand is reduced as the pile is recolonized by soil-dwelling microorganisms. Once cured, the compost will not generate odors (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Department* - the Mississippi Department of Environmental Quality (MDEQ) (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Department* - the Mississippi Department of Environmental Quality (MDEQ, SW-9, Section I (C)) [Added May 2006].
- *Disease Vectors* - any rodents, birds, flies, mosquitoes, or other animals, including insects, capable of transmitting disease to humans (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006; Citation Revised March 2007].
- *Displacement* - the relative movement of any two sides of a fault measured in any direction (MDEQ, SW-2, Section I (C)) [Revised May 2006; Citation Revised March 2007].
- *Disposal* - the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste into or on any land or water so that such solid waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any water, including groundwaters (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Distributor or Supplier* - the person, organization or business engaged in the provision of a by-product to an end user (MDEQ, SW-9, Section I (C)) [Added May 2006].
- *End User* - the person, organization or business that will utilize a by-product in a manner consistent with these regulations and with the conditions of a Beneficial Use Determination issued under these regulations (MDEQ, SW-9, Section I (C)) [Added May 2006].
- *Executive Director* - the executive director of the MDEQ (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].

- *Existing Facility* - a facility that has obtained a valid permit or other authorization from the Department before the effective date of the rules applicable to the facility, excluding those which have closed and are no longer authorized to receive solid waste (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Existing Municipal Solid Waste Landfill (MSWLF) Unit* - any MSWLF unit that is receiving solid waste as of the effective date of these regulations. Waste placement in existing units must be consistent with past operating practices or modified practices to ensure good management (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Facility* - all contiguous land and structures, other appurtenances, and improvements on the land used for the management of solid waste (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Fault* - a fracture or a zone of fractures in any material along which strata on one side have been displaced with respect to that on the other side (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Floodplain* - the lowland and relatively flat areas adjoining inland and coastal waters, including flood-prone areas of offshore islands, that are inundated by the 100-yr flood (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Garbage* - putrescible, animal, and vegetable wastes resulting from the handling, preparation, cooking, and consumption of food, including wastes from markets, storage facilities, handling and sale of produce and other food products and excepting materials that may be serviced by garbage grinders and handled as household sewage (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Gas Condensate* - the liquid generated as a result of gas recovery process(es) at an MSWLF unit (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Generator* - the person, organization, business, industry, agency or institution whose daily activities or business results in the production of a by-product (MDEQ, SW-9, Section I (C)) [Added May 2006].
- *Groundwater* - water below the land surface in a zone of saturation (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Hazardous Wastes* - any waste or combination of wastes of a solid, liquid, contained gaseous, or semisolid form which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may:
  1. cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness
  2. pose a substantial present or potential hazard to human health of the environment when improperly treated, stored, transported, disposed of, or otherwise managed; are listed by the U.S. Environmental Protection Agency (USEPA) as hazardous wastes which exceed the threshold limits set forth in the USEPA regulations for classifying hazardous waste. Such wastes include, but are not limited to, those wastes which are toxic, corrosive, flammable, irritants, strong sensitizers, or which generate pressure through decomposition, heat, or other means. Such wastes do not include those radioactive materials regulated pursuant to the Mississippi Radiation Protection Law of 1976, appearing in Section 45-14-1 et seq (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Holocene* - the most recent epoch of the Quaternary Period, extending from the end of the Pleistocene Epoch to the present (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Household Waste* - any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas) (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].

- *Incinerator* - a combustion device specifically designed for the destruction by high temperature burning of solid, semisolid, liquid, or gaseous combustible waste and from which the solid residues contain little or no combustibles (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Industrial Solid Waste* - solid waste generated by manufacturing or industrial processes that is not a hazardous waste regulated under Subtitle C of the Resource Conservation and Recovery Act (RCRA). This term does not include mining waste or oil and gas waste. Such waste may include, but is not limited to, waste resulting from the following manufacturing processes (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006]:
  1. electrical power generation
  2. fertilizer/agricultural chemicals
  3. food and related products/byproducts
  4. inorganic chemicals
  5. iron and steel manufacturing
  6. leather and leather products
  7. nonferrous metals manufacturing/foundries
  8. organic chemicals
  9. plastics and resins manufacturing
  10. pulp and paper industry
  11. rubber and miscellaneous paper products
  12. stone, glass, clay, and concrete products
  13. textile manufacturing
  14. transportation equipment
  15. water treatment.
- *Karst Terrain* - areas where karst topography, with its characteristic surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terrains include, but are not limited to, sinkholes, sinking streams, caves, large springs, and blind valleys (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Lake or Reservoir* - a body of water not owned by the applicant or facility owner having greater than 10 acres of surface area at such time as the spillway overflows with a primary purpose other than wastewater storage or treatment (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Land Application Site* - a site upon which sludges are applied and incorporated into the soil to establish a media for biodegradation of the waste or for the purpose of fertilization or soil conditioning (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Landfill* - a controlled area of land upon which solid wastes are deposited, compacted, and covered with no onsite burning of wastes, and which is located, contoured, drained and operated so that it will not cause an adverse effect on public health or the environment. This term includes MSWLF units and other landfills, but not sites that receive only rubbish (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Lateral Expansion* - a horizontal expansion of the waste boundaries of an existing solid waste management facility. In the context of an MSWLF unit, this term includes previously permitted areas where such areas have not received wastes. In the context of other facilities, this term does not include previously permitted areas where such areas have not received waste (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Leachate* - a liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].

- *Liquid Waste* - any waste material that is determined to contain free liquids as defined by Method 9095 (Paint Filter Liquids Test), as described in Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods (USEPA Pub. No. SW-846) (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Lithified Earth Material* - all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term does not include manmade materials such as fill, concrete, and asphalt, or unconsolidated earth materials, soil, or regolith lying at or near the earth's surface (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Lower Explosive Limit* - the lowest percent by volume of a mixture of explosive gases in air that will propagate a flame at 25 Degrees C and atmospheric pressure (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Maximum Horizontal Acceleration in Lithified Earth Material* - the maximum expected horizontal acceleration depicted on a seismic hazard map, with a 90 percent or greater probability that the acceleration will not be exceeded in 250 yr, or the maximum expected horizontal acceleration based on a site-specific seismic risk assessment (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Mesophilic Stage* - the biological stage in the composting process characterized by active bacteria which favor a moderate temperature range of 20 to 45 Degrees C (68 to 113 Degrees F). It occurs later in the composting process after the thermophilic stage and is associated with a moderate range of decomposition (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Mobile Waste Tire Processing Equipment* - a mobile waste tire processing operation which does not operate at any one fixed facility for more than 90 days annually (MDEQ, SW-4 *Waste Tire Management Regulations* (SW-4), Section B) [Citation Revised May 1999; Citation Revised May 2006].
- *Motor Vehicle* - an automobile, motorcycle, trailer, semi-trailer, truck tractor and semi-trailer combination, farm equipment or any other vehicle operated on the roads of the state, used to transport persons or property, and propelled by power other than muscular power, but does not include traction engines, road rollers, earth movers, graders, loaders, and other similar construction equipment requiring oversized tires, any vehicles which run only upon a track, bicycles or mopeds. For purposes of this article, "farm equipment" means any vehicle which uses tires having the following designations: I-1, I-2, I-3, R-1, R-2, R-3, F-1, F-2, and Farm Highway Service (MDEQ, SW-4 Section B) [Revised May 1999; Citation Revised May 2006].
- *Municipal Solid Waste* - any nonhazardous solid waste resulting from the operation of residential, commercial, governmental, industrial, or institutional establishments, except oil field exploration and production wastes and sewage sludge (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Municipal Solid Waste Landfill (MSWLF) Unit* - a discrete area of land or an excavation that receives household waste (including ash from a municipal solid waste combustion facility) and that is not a land application unit, surface impoundment, injection well, or waste pile. An MSWLF unit may also receive other types of RCRA Subtitle D waste, such as commercial solid waste, nonhazardous sludge, small quantity generator waste, and industrial solid waste. Such a landfill may be publicly or privately owned. An MSWLF unit may be a new MSWLF unit, an existing MSWLF unit, or a lateral expansion (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Municipal Solid Waste Management Facility* - any land, building, plant, system, motor vehicle, equipment or other property, whether real, personal, or mixed, or any combination of either thereof, used or useful or capable of future use in the collection, storage, treatment, utilization recycling, processing, transporting or disposal of municipal solid waste, including transfer stations, incinerators, sanitary landfill facilities, or other facilities necessary or desirable (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].



- *New Facility* - a facility that has not received waste and which has not applied for or received a valid permit or other authorization from the Department to receive waste prior to the effective date of the rule applicable to the facility, including any land area of an existing facility that has not been previously permitted (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *New Landfill* - a landfill that has not received waste and which has not applied for or received a valid permit or other authorization from the Department to receive waste prior to the effective date of the rule applicable to the landfill, including any land area of an existing landfill that has not been previously permitted (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *New MSWLF Unit* - any municipal solid waste landfill unit that has not received waste prior to the effective date of the rule applicable to the unit (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Normal Farming Operations* - the customary and generally accepted activities, practices, and procedures that farmers adopt or utilize on their own property for their own use during the production and preparation for market of poultry, livestock, and associated farm products, and in the production and harvesting of crops, including agronomic, horticultural, and silvicultural crops (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Open Burning* - the combustion of solid waste without the following:
  1. control of combustion air to maintain adequate temperature for efficient combustion
  2. containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion
  3. control of the emission of the combustion products (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *100-Year Flood* - a flood that has a 1 percent or greater chance of recurring in any given year or a flood of a magnitude equaled or exceeded once in 100 yr on the average over a significantly long period (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Operator* – the person who directly supervises and is personally responsible for the daily operation and maintenance of a commercial nonhazardous solid waste management facility (MDEQ, SW-8 Certification of Operators of Solid Waste Disposal Facilities (SW-8), Section II) [Added May 2006].
- *Outdoor Facility* - a facility in which any solid waste management activity, including storage, is not adequately enclosed within a walled and roofed structure (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Owner* - the person(s) who owns a facility or part of a facility and is responsible for the overall operation (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Permit* - the formal written approval issued to the applicant for a solid waste management facility by the Mississippi Environmental Quality Permit Board (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Permit Board* - the Mississippi Environmental Quality Permit Board (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Person* - any individual, trust, firm, joint stock company, public or private corporation (including a government corporation), partnership, association, state, or any agency or institution thereof, municipality, commission, political subdivision of a state or any interstate body, and includes any officer or governing or managing body of any municipality, political subdivision, or the United States or any officer or employee thereof (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].

- *Plant Available Nitrogen* - the amount of nitrogen available for plant uptake. It consists of all the nitrate and ammonia present in the soil and a fraction of the organic nitrogen present which can be expected to be converted to an inorganic form during a given year (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Polychlorinated Biphenyls (PCBs)* - any chemical substance that is limited to the biphenyl molecule which has been chlorinated to varying degrees or any combination of substances which contain such substances (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *PCB Wastes* - the PCBs and PCB Items that are subject to the Federal disposal requirements (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Poor Foundation Conditions* - those areas where features exist which indicate that a natural or man-induced event may result in inadequate foundation support for the structural components of a landfill (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Processing Facility* - a facility, other than a composting facility, used to sort, shred, grind, bale, or otherwise process solid waste; or a facility where waste is unloaded onto the ground or onto a tipping floor for purposes other than composting or ultimate disposal. The term does not include facilities which receive and manage only recyclable components of solid wastes that are removed at least annually (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Public Water Supply Well* - a water supply well which is regulated by the Safe Drinking Water Act of 1974, the Mississippi Drinking Water Law of 1976, or regulations promulgated thereunder (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Putrescible Wastes* - solid waste which are capable of being decomposed by microorganisms with sufficient rapidity to cause nuisances from odors or gases (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Putrescible Waste* - solid wastes, which are capable of being decomposed by micro-organisms with sufficient rapidity to cause nuisances from odors or gases (MDEQ, SW-9, Section I (C)) [Added May 2006].
- *Qualified Groundwater Scientist* - a scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and has sufficient training and experience in groundwater hydrology and related fields as may be demonstrated by state registration, professional certifications, or completion of accredited university programs that enable that individual to make sound professional judgments regarding groundwater monitoring, contaminant fate and transport, and corrective action (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Recyclables* - residuals which are intended to be sold or delivered to the open market for recycling or processing into a marketable product (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Residuals* - material removed from a processing or composting facility which cannot be processed or composted (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Reusable Tire* - a whole tire which has been specifically separated from the waste tires and which is suitable for processing or resale for its original intended purpose. A used tire which appears to be suitable for its original intended purposes but which has not been separated from waste tires for such purposes shall be considered to be a waste tire (MDEQ, SW-4 Section B) [Citation Revised May 1999; Citation Revised May 2006].
- *Rubbish* - nonputrescible solid wastes (excluding ashes) consisting of both combustible and noncombustible wastes. Combustible rubbish includes paper, rags, cartons, wood, furniture, rubber, plastics, yard trimmings, leaves, and similar material. Noncombustible rubbish includes glass, crockery, metal cans, metal furniture, and

like material which will not burn at ordinary incinerator temperatures (not less than 1600 °F) (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].

- *Rubbish Site* - a site that receives rubbish for the purpose of disposal (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Runoff* - any rainwater, leachate, or other liquid that drains over land from any part of a facility (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Run-On* - any rainwater, leachate, or other liquid that drains over land onto any part of a facility (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Saturated Zone* - that part of the earth's crust in which all voids are filled with water (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Scavenging* - the uncontrolled and unauthorized removal of materials at any point in the solid waste management system (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *7Q10 Flow* - the average streamflow rate over 7 consecutive days that may be expected to be reached as an annual minimum no more frequently than 1 yr in 10 (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Sewage Sludge* - any sludge generated from a municipal, commercial, or industrial wastewater treatment plant which receives a significant quantity of domestic sewage (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Single Family Dwelling Unit* - refers to either:
  1. a conventional single family detached dwelling or mobile home
  2. a unit within a multi-family residential complex (townhouses, condominiums, or apartments) (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Sludge* - any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment facility (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Solid Waste* - any garbage, refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining and agricultural operations and from community activities, but does not include solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permit under 33 U.S. Code (USC) 1342, or source, special, nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Solid Waste* - any garbage, or refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved materials in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permit under 33 U.S.C. 1342, or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923) (MDEQ, SW-9, Section I (C)) [Added May 2006].
- *Solid Waste Management Facility* - any facility which manages nonhazardous solid waste including landfills, rubbish sites, land application sites, processing facilities, composting facilities, transfer stations, and waste

incinerators, but excluding ordinary storage vessels such as trash cans, dumpsters, etc Notwithstanding anything in these regulations to the contrary, all solid waste management facilities are subject to these regulations except those which manage only the following solid wastes (MDEQ, SW-2, Section I, (B)and (C)) [Revised May 2006]:

1. Hazardous wastes which are subject to regulation under Subtitle C of RCRA, as amended
  2. Domestic sewage or industrial wastewater that passes through a sewer system or wastewater treatment works and which is subject to regulation under any other state or federal environmental regulatory program. (Unless paragraph B.6. of this section is applicable, this exclusion does not apply to sludges and other materials once they are removed from the wastewater treatment works and disposed.)
  3. Solid wastes generated by the growing or harvesting of agricultural crops or the raising of animals (including animal manure), where such wastes are returned to the soil as fertilizers or soil conditioner.
  4. Rubbish that is legitimately used, reused, recycled or reclaimed, except for rubbish wastes which is composted or which, due to its chemical or physical constituency, would result in an endangerment to the environment or the public health, safety, or welfare.
  5. Solid wastes generated in silviculture activities (e.g., timber harvesting slash and land clearing debris) whenever such wastes are left onsite.
  6. Solid wastes processed on the same property on which wastes are generated in a processing facility owned and operated by the generator.
  7. Solid wastes which do not constitute an endangerment to the environment or the public health, safety or welfare and which are disposed of on the same property on which wastes are generated. In determining whether a solid waste constitutes an endangerment to the environment or the public health, safety or welfare, the Permit Board shall consider both the quantity and quality of the solid waste, the location of the disposal property and any other factors which would warrant special concern. Garbage and rubbish containing garbage have been determined by the Commission and by the Department to have characteristics that constitutes an endangerment to the environment, public health, safety, and welfare of the general public within the meaning of Section 17-17-13, Mississippi Code Annotated, and accordingly, are not included in this exemption. All garbage and rubbish containing garbage regardless of where it is disposed or who the generator is, shall be managed in accordance with these regulations and other laws, rules, and regulations pertaining to the management of garbage and rubbish containing garbage.
  8. Mining overburden returned to the mine site.
  9. Wastes subject to regulation under Part C of the Federal Safe Drinking Water Act.
  10. Wastes associated with the exploration or production of crude oil or natural gas, except where those wastes are disposed or processed in a commercial oil field exploration and production waste disposal facility.
- *Standing Use Determination* - a Beneficial Use Determination approved by the Department for a specific by-product/use combination or for a category of by-product/use combinations that are contained or conducted in such a manner that does not offer potential for adverse environmental or public health impacts. Uses with standing determinations do not require a use specific application nor review and approval by the Department under these regulations (MDEQ, SW-9, Section I (C)) [Added May 2006].
  - *Storage* - the containment of wastes, either on a temporary basis or for a period of years in such a manner as not to constitute disposal of such wastes (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
  - *Stream or River* - a flowing body of water with a 7Q10 flow greater than zero (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
  - *Structural Components* - liners, leachate collection systems, final covers, run-on/runoff systems, and any other component used in the construction and operation of the MSWLF that is necessary for protection of human health and the environment (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
  - *Thermophilic Stage* - the biological stage of the composting process characterized by active bacteria which favor a high temperature range of 45 to 75 Degrees C (113 to 167 Degrees F). It occurs early in the composting

process before the mesophilic stage and is associated with a high rate of decomposition (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].

- *Tire* - a continuous solid or pneumatic rubber covering encircling the wheel of a motor vehicle (MDEQ, SW-4 Section B) [Citation Revised May 1999; Citation Revised May 2006].
- *Transfer* - any sale, conveyance, or assignment of the rights held by the applicant in any permit issued pursuant to these regulations. Any change of more than 50 percent of the equity ownership of the permit holder over a sustained period which results in a new majority owner shall constitute a transfer. A new majority owner for purposes of this provision shall be an individual, partnership, company, or group of affiliated companies (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Transfer Station* - a fixed facility used for transferring solid waste from collection vehicles to long-haul vehicles, where the waste is not unloaded onto a tipping floor or the ground (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Transport* - the movement of wastes from the point of generation to any intermediate points and finally to the point of ultimate storage or disposal (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Unstable Area* - a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. Unstable areas can include poor foundation conditions, areas susceptible to mass movements, and Karst terrains (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Uppermost Aquifer* - the geologic formation nearest the natural ground surface that is an aquifer, as well as, lower aquifers that are hydraulically interconnected with the aquifer within the facility's property boundary (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Vermicomposting* - a composting process that utilizes worms in the biological decomposition of waste (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Washout* - the carrying away of solid waste by waters of the base flood (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Waste Management Unit Boundary* - a vertical surface located at the hydraulically downgradient limit of the unit. This vertical surface extends down into the uppermost aquifer (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].
- *Waste Tire* - a whole tire that is no longer suitable for its original intended purpose because of wear, damage, or defect (MDEQ, SW-4 Section B) [Citation Revised May 1999; Citation Revised May 2006].
- *Waste Tire Collection Site* - (MDEQ, SW-4 Section B) [Citation Revised May 1999; Citation Revised May 2006].
- *Waste Tire Disposal Site* - a site where tires are buried or incinerated in a manner that does not facilitate recycling, resource recovery, or reuse of the waste tires or their byproducts (MDEQ, SW-4 Section B) [Citation Revised May 1999; Citation Revised May 2006].
- *Waste Tire Generator* - any person who produces or stores waste tires on property owned or leased by that person (MDEQ, SW-4 Section B) [Citation Revised May 1999; Citation Revised May 2006].

- *Waste Tire Hauler* - any person engaged in the collection and/or transportation of 50 or more waste tires for the purpose of storage, processing, or disposal; or any person transporting waste tires for compensation (MDEQ, SW-4 Section B) [Citation Revised May 1999; Citation Revised May 2006].
- *Waste Tire Processing Facility* - a site where tires are reduced in volume by shredding, cutting, chopping, or otherwise altered to facilitate recycling, resource recovery, or disposal. The term includes mobile waste tire processing equipment. Commercial enterprises processing waste tires are not considered solid waste management facilities (MDEQ, SW-4 Section B) [Citation Revised May 1999; Citation Revised May 2006].
- *Waste Tire Transporter* - any person engaged in the transportation of waste tires (MDEQ, SW-4 Section B) [Citation Revised May 1999; Citation Revised May 2006].
- *Yard Waste* - the leaves, grass cuttings, weeds, garden waste, tree limbs, and other vegetative wastes generated at residential, commercial, institutional, governmental, or industrial properties (MDEQ, SW-2, Section I (C)) [Citation Revised May 2006].

**SOLID WASTE MANAGEMENT  
GUIDANCE FOR MISSISSIPPI CHECKLIST USERS**

**REFER TO CHECKLIST ITEMS:**

Missing Checklist Items	SO.2.1.MS.
State Specific	
General	SO.5.1.MS.
Permits/Notifications/Exemptions	SO.6.1.MS.
Specific Wastes	SO.9.1.MS. through SO.9.4.MS.
Storage/Collection of Solid Waste	SO.10.1.MS. and SO.10.2.MS.
Transfer Facilities	SO.15.1.MS.
Transportation	SO.20.1.MS.
Municipal Solid Waste Landfills (MSWLFs)	
(NOTE: Sections SO.55.MS. through SO.85.MS. have been deleted as of June 1998 (except for SO.65.1.MS.); they were duplicates of the Federal requirements found in sections SO.55 through SO.85 of the U.S. TEAM Guide.)	
Permits	[Deleted]
Operating Criteria	SO.65.1.MS.
Medical Waste	
Generators	[Deleted]
Containers/Labeling/Storage Areas	[Deleted]
Treatment/Disposal	[Deleted]
Landfills	SO.135.1.MS. and SO.135.32.MS.
Waste Tire Management	SO.160.1.MS. through SO.160.18.MS.
Yard Waste/Composting	SO.165.1.MS. through SO.165.8.MS.
Other Treatment/Processing Units	SO.175.1.MS. through SO.175.7.MS.

**GUIDANCE FOR MISSISSIPPI APPENDIX USERS**

**REFER TO APPENDIX NUMBERS:**

**REFER TO APPENDIX TITLES:**

9-1	Composting Facility Tests
9-2	Reduction in Organic Matter Formula for Composting Facilities
9-3	Maximum Allowable Compost Application Rate (MACAR) of Compost
9-4	Maximum Allowable Metal Application Rates (MAMARs) for Compost
9-5	Maximum Allowable Metal Application Rates (MAMARs) for Compost
9-6	Beneficial Use Categories

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>SO.2.</b></p> <p><b>MISSING CHECKLIST ITEMS</b></p> <p><b>SO.2.1.MS.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).</p>	<p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p>



<b>COMPLIANCE CATEGORY:</b> <b>SOLID WASTE MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>STATE SPECIFIC</b>  <b>SO.5.</b> <b>General</b>  <b>SO.5.1.MS.</b> Solid waste management facilities that do not meet the nonhazardous solid waste facility management requirements are considered to be open dumps and must be closed (MDEQ, SW-2, Section I:A (9)) [Citation Revised May 2006].	<p>Verify that any solid waste management facility which does not meet the solid waste management requirements is closed.</p> <p>(NOTE: Mississippi recognizes and regulates the following types of nonhazardous solid waste management facilities: landfills, transfer stations, rubbish sites, processing facilities, land application sites, and composting facilities.)</p>

<b>COMPLIANCE CATEGORY:</b> <b>SOLID WASTE MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>STATE SPECIFIC</b>  <b>SO.6.</b> <b>Permits/ Notifications/ Exemptions</b>  <b>SO.6.1.MS.</b> Nonhazardous solid waste management facilities must be permitted (MDEQ, SW-2, Section II: A and D) [Citation Revised May 2006].	<p>Verify that no solid waste management facility is operated without an individual permit from the Permit Board or a certificate of coverage under a general permit.</p> <p>Verify that applications for an individual permit or a notice of intent (NOI) for a certificate of coverage under a general permit are made on forms provided by the Department.</p>

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>STATE SPECIFIC</b></p> <p><b>SO.9. Specific Wastes</b></p> <p><b>SO.9.1.MS.</b> The disposal of lead acid batteries must meet specific requirements (Mississippi Code (MC) 17-17-429).</p> <p><b>SO.9.2.MS.</b> Beneficial use of nonhazardous solid waste must have departmental approval and meet specific requirements (MDEQ, SW-9, Section II) [Added May 2006].</p>	<p>Verify that lead acid batteries are not placed in mixed municipal solid waste, discarded, or otherwise disposed of except by delivery to a battery retailer, wholesaler, to a permitted secondary lead smelter, or to an authorized collection or recycling facility.</p> <p>Verify that the battery retailer disposes of lead acid batteries only by delivery to a battery wholesaler, a permitted secondary lead smelter, a battery manufacturer for delivery to a permitted secondary lead smelter, or an authorized collection or recycling facility.</p> <p>(NOTE: This checklist item applies to any person, organization, industry, business, agency, or institution that intends to obtain, distribute and/or use an eligible solid waste or by-product for the purposes of beneficial use in a manner for which the material was not specifically manufactured. This checklist does not apply to the following:</p> <ul style="list-style-type: none"> <li>- the recovery of common residential or commercial recyclable materials such as steel, aluminum, plastic, glass, paper, cardboard, wood or other materials that are post-consumer materials or pre-consumer off-specification materials where such materials are processed and/or managed as recyclable commodities</li> <li>- compost materials</li> <li>- uses of solid wastes in beneficial fill activities</li> <li>- hazardous wastes)</li> </ul> <p>Verify that prior to implementation of the intended use for any intended beneficial use of an eligible by-product, an application for a Beneficial Use Determination is submitted to the Department.</p> <p>(NOTE: This requirement does not apply to Category I determined uses described in Appendix 9-6.)</p> <p>Verify that the solid wastes, proposed for beneficial use, meets the following requirements:</p> <ul style="list-style-type: none"> <li>- the material, proposed for beneficial use, is a by-product (see definitions)</li> <li>- the solid waste or by-product is adequately characterized to confirm that the proposed use is adequately protective of the environment and human health</li> <li>- the solid waste or by-product is not putrescible waste or have other similar characteristics for potential nuisance</li> </ul>

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>SO.9.3.MS.</b> Beneficial use of nonhazardous solid waste must meet reporting requirements (MDEQ, SW-9, Section IV: A) [Added May 2006; Citation Revised March 2007].</p>	<ul style="list-style-type: none"> <li>- the by-product serves as a suitable replacement for a raw material or other feedstock and, through its use, provides a benefit comparable to the material it is proposed to replace</li> <li>- the beneficial use does not solely serve the purpose of discarding or disposing of the material</li> <li>- the beneficial use of a by-product has demonstrated use and/or market.</li> </ul> <p>(NOTE: Category I Beneficial Uses are exempt from this requirement (see Appendix 9-6.)</p> <p>Verify that a registrant to whom a beneficial use determination was issued submits an annual report to the Department, no later than February 28 of each year, for activity conducted during the previous calendar year.</p> <p>Verify that, at a minimum, the report contains the following information:</p> <ul style="list-style-type: none"> <li>- the approximate quantity of the by-product used and/or distributed for use during the previous calendar year for the approved use(s)</li> <li>- an appropriate physical and chemical characterization of the approved by-product</li> <li>- if the process generating the by-product has not changed, a signed certification from the generator or other party approved by the Department stating that the physical and chemical characteristics of the by-product are consistent with the information submitted in the approved application</li> <li>- any other information specified as a reporting condition of the Beneficial Use Determination.</li> </ul> <p>(NOTE: Registrants that have been issued multiple Beneficial Use Determinations for a by-product may submit one composite report. The composite report must distinguish the information for each determined use.)</p>
<p><b>SO.9.4.MS.</b> Category III beneficial use of nonhazardous solid waste must meet additional requirements (MDEQ, SW-9, Section IV: B) [Added May 2006; Citation Revised March 2006].</p>	<p>Verify that suppliers or distributors of category III beneficial use materials (see Appendix 9-6) advise end users of the by-product in writing of the acceptable agronomic rate of application and agronomic practices for use of the by-product.</p> <p>Verify that the registrant provide a written copy to the end user or users at the point of sale or distribution of the by-product.</p> <p>Verify that, prior to a Category III use of the by-product, the registrant obtains proper certification from the Mississippi Department of Agriculture and Commerce (MDAC) for the use of the proposed material as a soil amendment.</p> <p>Verify that in addition to the reporting requirement of SO.9.3.MS., registrants submit a copy of the original or the renewed product certification, where applicable, from the Mississippi Department of Agriculture and Commerce</p>

<b>COMPLIANCE CATEGORY:</b> <b>SOLID WASTE MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
	(MDAC) within 21 days of receipt of the certificate.

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>SO.10.</b></p> <p><b>STORAGE/ COLLECTION OF SOLID WASTE</b></p> <p><b>SO.10.1.MS.</b> Solid waste storage must not constitute a fire, safety, or health hazard (MDEQ, SW-2, Section V: B (1)) [Citation Revised July 1997; Citation Revised May 2006].</p> <p><b>SO.10.2.MS.</b> Solid waste containing putrescible materials must be collected and transported frequently enough to prevent the creation of a public health nuisance (MDEQ, SW-2, Section V: B (2)) [Citation Revised July 1997; Citation Revised May 2006].</p>	<p>Verify that solid waste is stored in a manner that does not constitute a fire, safety, or health hazard.</p> <p>Verify that solid waste is not stored in a manner that would provide food or harborage for animals and vectors.</p> <p>Verify that solid waste is contained or bundled so as not to result in litter.</p> <p>(NOTE: It is the responsibility of the occupant of a residence or the owner or manager of an establishment to utilize a storage system that will include containers of adequate size and strength, and in sufficient numbers, to contain all solid waste that the residence or other establishment generates in the period of time between collections.)</p> <p>Verify that solid waste containing putrescible materials is collected and transported to a disposal facility at an adequate frequency to prevent propagation and attraction of vectors and the creation of a public nuisance.</p>

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>SO.15.</b></p> <p><b>TRANSFER FACILITIES</b></p> <p><b>SO.15.1.MS.</b> Transfer stations must meet specific management requirements (MDEQ, SW-2, Section V: A (1), (2), and (6) through (10)) [Revised July 1997; Revised May 2006].</p>	<p>Verify the transfer station operates under an individual permit or a certificate of coverage under a general permit.</p> <p>Verify that the transfer station submits a notification of intent for coverage under any applicable general permit or individual permit which demonstrates that the facility will meet all applicable requirements.</p> <p>Verify that access to the transfer station is closed to the general public unless an attendant is onsite at all times the facility is open.</p> <p>Verify that a wood or wire fence is constructed around the facility for the purpose of preventing any windblown litter from escaping the property, unless the transfer station is operated within an enclosed building.</p> <p>(NOTE: The Department may grant a waiver from this requirement if another suitable means of achieving the same purpose can be demonstrated.)</p> <p>Verify that inadvertent litter is picked up on a regular basis in order to keep the property reasonably clean.</p> <p>Verify that open burning of solid waste is not conducted at the transfer station, except for landclearing debris generated on the site of the facility.</p> <p>Verify that all garbage and other putrescible waste are removed at least once per week.</p> <p>Verify that all solid waste transported from the transfer station is delivered to an authorized waste disposal facility or to another facility acceptable to the Department.</p>

<b>COMPLIANCE CATEGORY:</b> <b>SOLID WASTE MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>SO.20.</b></p> <p><b>TRANSPORTATION</b></p> <p><b>SO.20.1.MS.</b> All vehicles and equipment used for collection and transportation of solid waste must be managed in a manner that prevents loss of liquids or solid waste material and minimizes health and safety hazards (MDEQ, SW-2, Section V: B(3)) [Citation Revised July 1997; Citation Revised May 2006].</p>	<p>Verify that all vehicles and equipment used for the collection and transportation of a solid waste are managed to prevent loss of liquid or solid waste material and to minimize health and safety hazards to solid waste management personnel and the public.</p> <p>Verify that collection vehicles and equipment are maintained in a sanitary condition to preclude odors and fly-breeding.</p>



<b>COMPLIANCE CATEGORY:</b> <b>SOLID WASTE MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>MUNICIPAL SOLID WASTE LANDFILLS</b>  <b>SO.65.</b> <b>Operating Criteria</b>  <b>SO.65.1.MS.</b> Solid waste landfills must meet liner quality assurance standards (MDEQ, SW-2, Section IV: B (18)) [Citation Revised May 2006].	<p>Verify that the facility submits a construction quality assurance report to the Department at least 2 weeks prior to the disposal of solid waste in any new MSWLF unit, lateral expansion of existing MSWLF unit, or other landfill as deemed necessary by the Permit Board.</p> <p>Verify that the construction quality assurance report contains a certification from an independent registered professional engineer that the area has been constructed according to the approved design plans.</p>

<b>COMPLIANCE CATEGORY:</b> <b>SOLID WASTE MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>MEDICAL WASTE</b>  <b>SO.105.</b> <b>Generators</b>  <b>SO.105.1.MS.</b> [Deleted March 2009].	          (NOTE: MSDH, MW-1 Section I repealed.)

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>		
<b>REGULATORY REQUIREMENTS:</b>		<b>REVIEWER CHECKS: March 2010</b>
<b>MEDICAL WASTE</b>  <b>SO.110. Containers/ Labeling/ Storage Areas</b>		
<b>SO.110.1.MS.</b> March 2009].	[Deleted	(NOTE: MSDH, MW-1 repealed.)
<b>SO.110.2.MS.</b> March 2009].	[Deleted	(NOTE: MSDH, MW-1 repealed.)
<b>SO.110.3.MS.</b> March 2009].	[Deleted	(NOTE: MSDH, MW-1 repealed.)
<b>SO.110.4.MS.</b> March 2009].	[Deleted	(NOTE: MSDH, MW-1 repealed.)

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>		
<b>REGULATORY REQUIREMENTS:</b>		<b>REVIEWER CHECKS: March 2010</b>
<b>MEDICAL WASTE</b>  <b>SO.120. Treatment/ Disposal</b>		
<b>SO.120.1.MS.</b> [Deleted March 2009].		(NOTE: MSDH, MW-1 repealed.)
<b>SO.120.2.MS.</b> [Deleted March 2009].		(NOTE: MSDH, MW-1 repealed.)
<b>SO.120.3.MS.</b> [Deleted March 2009].		(NOTE: MSDH, MW-1 repealed.)
<b>SO.120.4.MS.</b> [Deleted March 2009].		(NOTE: MSDH, MW-1 repealed.)
<b>SO.120.5.MS.</b> [Deleted March 2009].		(NOTE: MSDH, MW-1 repealed.)
<b>SO.120.6.MS.</b> [Deleted June 1998].		(NOTE: This checklist item repeated SO.110.1.MS.)
<b>SO.120.7.MS.</b> [Deleted June 1998].		(NOTE: This checklist item repeated SO.110.2.MS. and SO.110.3.MS.)

<b>COMPLIANCE CATEGORY:</b> <b>SOLID WASTE MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>SO.135.</b>  <b>LANDFILLS</b>	
<b>SO.135.1.MS.</b> [Deleted June 1998].	(NOTE: See SO.5.4.MS.)
<b>SO.135.2.MS.</b> [Deleted June 1998].	(NOTE: See SO.5.4.MS.)
<b>SO.135.3.MS.</b> All new landfills must meet specific design criteria (MDEQ, SW-2, Section IV: C) [Revised June 1998;Citation Revised May 2006].	Verify that all new landfills (and lateral expansion of existing MSWLF units) meet the design requirements for MSWLFs found in section SO.60 in the U.S. TEAM Guide.
<b>SO.135.4.MS.</b> [Deleted June 1998].	(NOTE: Equivalent to the Federal requirements for MSWLFs; see SO.153.3.MS.)
<b>SO.135.5.MS.</b> All landfills must meet specific operating criteria (MDEQ, SW-2, Section IV: B) [Revised June 1998;Citation Revised May 2006].	Verify that landfills meet the operating criteria for MSWLFs found in section SO.65 in the U.S. TEAM Guide (with the exceptions noted below).  (NOTE: Landfills (other than MSWLFs) do not have to meet the requirements of checklist items SO.65.1 through SO.65.4)
<b>SO.135.6.MS.</b> [Deleted June 1998].	(NOTE: Equivalent to the Federal requirements for MSWLFs; see SO.153.5.MS.)
<b>SO.135.7.MS.</b> [Deleted June 1998].	(NOTE: Equivalent to the Federal requirements for MSWLFs; see SO.153.5.MS.)

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<b>SO.135.8.MS.</b> [Deleted June 1998].	(NOTE: Equivalent to the Federal requirements for MSWLFs; see SO.153.5.MS.)
<b>SO.135.9.MS.</b> [Deleted June 1998].	(NOTE: Equivalent to the Federal requirements for MSWLFs; see SO.153.5.MS.)
<b>SO.135.10.MS.</b> [Deleted June 1998].	(NOTE: Equivalent to the Federal requirements for MSWLFs; see SO.153.5.MS.)
<b>SO.135.11.MS.</b> [Deleted June 1998].	(NOTE: Equivalent to the Federal requirements for MSWLFs; see SO.153.5.MS.)
<b>SO.135.12.MS.</b> [Deleted June 1998].	(NOTE: Equivalent to the Federal requirements for MSWLFs; see SO.153.5.MS.)
<b>SO.135.13.MS.</b> [Deleted June 1998].	(NOTE: Equivalent to the Federal requirements for MSWLFs; see SO.153.5.MS.)
<b>SO.135.14.MS.</b> [Deleted June 1998].	(NOTE: This checklist item pertains only to commercial nonhazardous solid waste landfills; see SO.135.30.MS. below.)
<b>SO.135.15.MS.</b> [Deleted June 1998].	(NOTE: This checklist item pertains only to commercial nonhazardous solid waste landfills; see SO.135.31.MS. below.)
<b>SO.135.16.MS.</b> Landfills must meet groundwater monitoring and corrective action requirements (MDEQ, SW-2, Section IV: D) [Revised June 1998;Citation	Verify that landfills meet the groundwater monitoring requirements for MSWLFs found in section SO.70 in the U.S. TEAM Guide.

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
Revised May 2006].	
<b>SO.135.17.MS.</b> [Deleted June 1998].	(NOTE: Equivalent to the Federal; see SO.135.16.MS.)
<b>SO.135.18.MS.</b> [Deleted June 1998].	(NOTE: Equivalent to the Federal; see SO.135.16.MS.)
<b>SO.135.19.MS.</b> [Deleted June 1998].	(NOTE: Equivalent to the Federal; see SO.135.16.MS.)
<b>SO.135.20.MS.</b> [Deleted June 1998].	(NOTE: Equivalent to the Federal; see SO.135.16.MS.)
<b>SO.135.21.MS.</b> [Deleted June 1998].	(NOTE: Equivalent to the Federal; see SO.135.16.MS.)
<b>SO.135.22.MS.</b> [Deleted June 1998].	(NOTE: Equivalent to the Federal; see SO.135.16.MS.)
<b>SO.135.23.MS.</b> [Deleted June 1998].	(NOTE: Equivalent to the Federal; see SO.135.16.MS.)
<b>SO.135.24.MS.</b> Landfills must meet specific closure requirements (MDEQ, SW-2, Section IV: E (2)) [Revised June 1998; Citation Revised May 2006].	<p>Verify that landfills meet the closure criteria for MSWLFs found in section SO.75 in the U.S. TEAM Guide (with the exception noted below).</p> <p>(NOTE: Landfills (other than MSWLFs) do not have to meet the requirements of checklist item SO.75.2 in the U.S. TEAM Guide.)</p>

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<b>SO.135.25.MS.</b> Landfills must meet specific postclosure care requirements (MDEQ, SW-2, E (3)) [Revised June 1998; Citation Revised May 2006].	<p>Verify that landfills meet the post-closure care criteria for MSWLFs found in section SO.80 in the U.S. TEAM Guide.</p>
<b>SO.135.26.MS.</b> Rubbish sites must submit notification forms (MDEQ, SW-2, Section VI: A (1) and (2)). [Revised July 1997; Citation Revised May 2006].	<p>Verify that an individual permit or a certificate of coverage under a general permit is obtained prior to the operation of a rubbish site.</p> <p>Verify that the rubbish site submits a notification of intent on forms provided by the Department that demonstrates that the facility will meet all applicable solid waste requirements.</p> <p>(NOTE: The class of rubbish site is determined by the type of waste it receives.)</p>
<b>SO.135.27.MS.</b> Class I Rubbish Sites must only receive specific types of waste for disposal and have a certified operator (MDEQ, SW-2, Section VI: B and SW-4, Section I: B) [Revised May 2006].	<p>Verify that the Class I Rubbish Site accepts only the following wastes for disposal:</p> <ul style="list-style-type: none"> <li>- construction and demolition debris, such as wood, metal, etc.</li> <li>- brick, mortar, concrete, stone, and asphalt</li> <li>- cardboard boxes</li> <li>- natural vegetation, such as tree limbs, stumps, and leaves</li> <li>- appliances (other than refrigerators and air conditioners) which have had the motor removed</li> <li>- plastic, glass, crockery, and metal, except containers</li> <li>- furniture</li> <li>- sawdust, wood shavings, and wood chips</li> <li>- other wastes specifically approved by the Department which will not have an adverse effect on the environment.</li> </ul>
<b>SO.135.28.MS.</b> Class II Rubbish Sites must receive only specific types of waste for disposal (MDEQ, SW-2, Section VI: C) [Revised May 2006].	<p>Verify that the Class II Rubbish Site receives only the following waste for disposal:</p> <ul style="list-style-type: none"> <li>- natural vegetation, such as tree limbs, stumps, and leaves</li> <li>- brick, mortar, concrete, stone, and asphalt</li> <li>- other wastes specifically approved by the Department.</li> </ul>
<b>SO.135.29.MS.</b> Specific wastes are prohibited from	<p>Verify that the following wastes are not disposed of at any rubbish site:</p>



<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p>disposal at all rubbish sites (MDEQ, SW-2, Section VI: D) [Revised May 2006].</p> <p><b>SO.135.30.MS.</b> Class I and Class II rubbish sites must be operated according to specific requirements (MDEQ, SW-2, Section VI: E) [Revised July 1997; Revised May 2006].</p>	<ul style="list-style-type: none"> <li>- any acceptable waste which has been contaminated by a possible pollutant, such as a food or chemical</li> <li>- household garbage and other food and drink waste</li> <li>- liquids, sludges, and contaminated soils</li> <li>- paint, paint buckets, oil containers, and chemical containers</li> <li>- engines, motors, whole tires, and all types of batteries</li> <li>- asbestos and asbestos containing material</li> <li>- toxic or hazardous waste</li> <li>- medical waste</li> <li>- fabric, paper, refrigerators, air conditioners, cut or shredded tires, and any metal, glass, plastic, or paper container, unless specifically approved by the Department</li> <li>- other wastes which are specifically determined by the Department to have an adverse effect on the environment.</li> </ul> <p>Verify that adequate security and monitoring is established and maintained to prevent uncontrolled access and disposal.</p> <p>Verify that an attendant is on duty at any time access to the site is unsecured.</p> <p>Verify that the disposal of waste is limited to the area described in the notification form.</p> <p>Verify that disposal of waste is limited to those wastes appropriate for the type of rubbish site. (see SO.135.27.MS. through and SO.135.29.MS)</p> <p>(NOTE: Loads with incidental amounts of unauthorized wastes may be allowed to dump if the unauthorized wastes are immediately removed from the site and properly disposed at an authorized disposal facility or placed in a waste receptacle for later transfer.)</p> <p>Verify that a periodic earth cover is applied to the wastes at least every 2 weeks, or as required by the Department.</p> <p>Verify that windblown and scattered litter and debris are collected from around the site at the end of every operating day and returned to the active working area for proper disposal.</p> <p>Verify that open burning is not used as a disposal method for solid waste, unless it is land clearing debris.</p> <p>Verify that there is an adequate supply of water under pressure at the site, an adequate stockpile of earth reasonably close to the disposal area is provided, or there is a nearby organized Fire Department providing services when called.</p> <p>(NOTE: The Department may approve alternate methods of fire protection or</p>

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
	<p>waive this requirement when there is no need for fire protection.)</p> <p>Verify that the facility takes immediate action to extinguish any fire and promptly notifies the Department should an accidental fire occur.</p> <p>Verify that rubbish is not disposed of in standing water or in any manner that may result in washout of waste.</p> <p>Verify that the site is developed and contoured to direct runoff away from the active disposal area and to prevent ponding of water onsite.</p> <p>Verify that unloading and disposal of rubbish are controlled by the facility and confined to as small an area as practical.</p> <p>Verify that at least 2 ft of earthen cover is applied as a final cover within 30 days of completing an area.</p> <p>Verify that suitable vegetation is promptly established and maintained following the soil placement.</p> <p>Verify that any erosion occurring on completed areas is promptly repaired.</p> <p>Verify that any area that has not received waste in the past 12 mo is covered according to the cover requirements.</p> <p>Verify that the facility notifies the Department upon final closure of the site.</p> <p>Verify that the owner complies with any additional requirements included in the permit.</p>
<p><b>SO.135.31.MS.</b> Commercial nonhazardous solid waste landfills must meet annual reporting requirements (MDEQ, SW-2, Section IV: B (14)) [Added June 1998; Revised May 2006].</p>	<p>Verify that the commercial nonhazardous solid waste landfill submits an annual report containing information about the preceding calendar year to the Department no later than 28 February of each year.</p> <p>(NOTE: This checklist item was moved here from SO.85.2.MS.)</p>
<p><b>SO.135.32.MS.</b> Commercial solid waste landfills must meet operator certification requirements (MDEQ, SW-2, Section IV: B (19) and MDEQ SW-8 Section I: (B))</p>	<p>Verify that the commercial solid waste landfill is operated by a person who holds a current certificate of competency.</p> <p>Verify that the certified operator has direct supervision over and is personally responsible for the daily operation and maintenance of the landfill.</p>

<b>COMPLIANCE CATEGORY:</b> <b>SOLID WASTE MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
[Revised June 1998; Revised May 2006].	(NOTE: This checklist item was moved here from SO.65.14.MS.)

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>SO.160.</b></p> <p><b>WASTE TIRE MANAGEMENT</b></p> <p><b>SO.160.1.MS.</b> Waste tire collection sites must be authorized by the Department (MDEQ, SW-4, Section A (1), (3), and (5), and C (1)) [Citation Revised July 1997; Revised May 1999; Citation Revised May 2006].</p> <p><b>SO.160.2.MS.</b> Waste tire collection sites where waste tires are stored indoors must meet specific technical and operational requirements (MDEQ, SW-4, Section C (2)) [Revised July 1997; Revised May 1999; Citation Revised May 2006].</p>	<p>Verify that the collection site has obtained written authorization from the Department to operate a waste tire collection site.</p> <p>(NOTE: Any tire retailer, tire wholesaler, motor vehicle dismantler, or salvage dealer who owns or operates a waste tire collection site is exempt from this requirement if the site does not:</p> <ul style="list-style-type: none"> <li>- hold more than 500 waste tires</li> <li>- hold more than 100 waste tires for a period exceeding 90 days.)</li> </ul> <p>(NOTE: Waste tire collection sites that propose to use waste tires for agricultural, erosion control, or other purposes, as approved by the Department, and store less than 500 waste tires that do not remain stockpiled onsite for longer than 90 days without a permit, are exempt from this authorization requirement.)</p> <p>(NOTE: In certain instances the Permit Board may require that a permit be obtained to operate a waste tire collection site.)</p> <p>Determine whether a waste tire collection site is in operation in which the waste tires are stored indoors.</p> <p>Verify that each waste tire storage pile is no greater than 25 ft wide and 50 ft long.</p> <p>Verify that storage clearance in all directions from roof structures is not less than 3 ft.</p> <p>Verify that the width of main aisles between piles are not less than 8 ft.</p> <p>Verify that the collection site possess an automatic sprinkler, if required.</p> <p>Verify that storage clearance from the top of storage to sprinkler deflectors is not less than 3 ft.</p> <p>Verify that tires are stored clear of all blower and exhaust ducts.</p> <p>Verify that storage clearance from unit heaters, radiant space heaters, duct furnaces, and flues is not less than 3 ft in all directions.</p> <p>Verify that clearance is maintained to lights or light fixtures, all entrance ways,</p>

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>SO.160.3.MS.</b> Waste tire collection sites where waste tires are stored outdoors must meet specific technical and operational requirements (MDEQ, SW-4, and Section C (3)) [Revised May 1999; Citation Revised May 2006].</p>	<p>exits, and fire doors to prevent possible ignition.</p> <p>Verify that the collection site controls mosquitoes and rodents so as to protect the public health and welfare and to prevent nuisances.</p> <p>Determine whether there is a waste tire collection site in operation in which the waste tires are stored outdoors.</p> <p>Verify that each waste tire storage pile is no greater than 15-ft high, 50-ft wide, and 100-ft long.</p> <p>Verify that a minimum separation distance of 50 ft is maintained between waste tire storage piles as a fire lane.</p> <p>Verify that access to the fire lane for emergency vehicles is unobstructed at all times.</p> <p>Verify that the site is kept free of grass, underbrush, and other potentially flammable vegetation at all times.</p> <p>Verify that the collection site controls mosquitoes and rodents so as to protect the public health and welfare.</p> <p>Verify that waste tire storage piles are kept at least 50 ft from the adjacent property line.</p> <p>(NOTE: An alternate separation distance may be approved by the Department contingent upon such factors as date of facility establishment, quantity of waste tires stored, nature of business operations, surrounding property use, and other factors.)</p> <p>Verify that access to the site is controlled through the use of fences, gates, natural barriers, or other means.</p>
<p><b>SO.160.4.MS.</b> Waste tire collection sites must meet specific operational requirements (MDEQ, SW-4, Section C (4) through (11)) [Revised May 1999; Citation Revised May 2006].</p>	<p>(NOTE: A collection site may receive approval to operate a waste tire collection site in which waste tires are stored in trailers, vans, or other mobile storage facilities.)</p> <p>Determine the maximum storage capacity of the waste tire collection site from the facility permit.</p> <p>Determine whether the waste tire collection site separates reusable tires from waste tires for processing or resale for their original intended purpose.</p>

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>SO.160.5.MS.</b> Waste tire collection sites must meet recordkeeping and reporting requirements (MDEQ, SW-4, and Section C (12) through (13)) [Revised May 1999; Revised May 2006].</p>	<p>Verify that collection sites separating reusable waste tires store the tires in a manner consistent with waste tire storage requirements and remove the tires from the collection site on a frequency sufficient to prevent problems of mosquitoes breeding, harborage of rodents, potential fire hazards, or compliance problems.</p> <p>Verify that all waste tires are either processed or removed from the site within a reasonable time frame not to exceed 90 days.</p> <p>Verify that a sign is posted at the entrance of the site stating operating hours, and an attendant is present at the site at all operating hours of the facility.</p> <p>Verify that fire protection services for the waste tire collection site are assured through notification of local fire protection authorities and compliance with any local fire codes or ordinances.</p> <p>Verify that immediate action is initiated to extinguish any fire, offsite impact of the fire is limited, and the Department is notified as soon as possible.</p> <p>Verify that the collection site meets the transportation and certification requirements of the Waste Tire Transportation Regulations as adopted by the Commission.</p> <p>Verify that the collection site maintains records for a minimum of 3 yr after the removal date of the tires.</p> <p>Verify that, when waste tire loads of 5 or more received at the site or shipped from the site, the following information is maintained:</p> <ul style="list-style-type: none"> <li>- the name and waste tire hauler identification number of the hauler who transported the tires from the site and the quantity of waste tires</li> <li>- the name, address, and telephone number of the waste tire transporter and the quantity of tires.</li> </ul> <p>Verify that, when waste tire loads of 5 or less received or shipped from the site, the following information is maintained:</p> <ul style="list-style-type: none"> <li>- the total monthly quantity of waste tires received</li> <li>-the total monthly quantity of waste tires shipped for all transporters.</li> </ul> <p>Verify that, where applicable, the quantity of reusable tires separated from incoming loads at the site and the retreading/resale facility to which they are shipped is maintained.</p> <p>Verify that collection site operating waste tire collection sites submit a monthly report, before the 15th of the following month on forms provided by the</p>

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>SO.160.6.MS.</b> Waste tire collection sites must meet specific closure requirements (MDEQ, SW-4, Section C (14) through (16)) [Citation Revised May 2006].</p>	<p>Department.</p> <p>Verify that the collection site submits a closure plan with the permit application.</p> <p>Verify that the collection site implements the approved closure plan and takes the following actions to ensure that the site is properly closed upon cessation of operations:</p> <ul style="list-style-type: none"> <li>- notify the Department at least 90 days prior to the date of expected closure</li> <li>- take action to prevent public access to the site</li> <li>- post a notice at the site indicating that the site is closed</li> <li>- take action to ensure that all tires at the site have been properly processed, disposed, or otherwise managed</li> <li>- take other appropriate remediation action at the site if deemed necessary by the Department</li> <li>- notify the Department upon completion of the closure activity.</li> </ul> <p>Verify that no waste tires are received by the waste tire collection site after the date of closure.</p>
<p><b>SO.160.7.MS.</b> Waste tire processing facilities must meet specific authorization and permitting requirements (MDEQ, SW-4, Sections A (2) and (4), and D (1)) [Revised May 1999; Citation Revised May 2006].</p>	<p>Verify that the processing facility obtains a waste tire management permit from the Permit Board to operate a waste tire processing facility.</p> <p>Verify that the processing facility has obtained authorization from the Department before operating mobile waste tire processing equipment.</p> <p>(NOTE: Waste tire generators which chop, cut, shred or vertically slice waste tires that they generate, on the site of generation, in order to facilitate recycling, resource recovery, or disposal at an approved waste tire disposal site are exempt from permit requirements.)</p> <p>(NOTE: Facilities or businesses which receive reusable and/or waste tires for purposes such as retreading or resale are not considered to be waste tire processing facilities; however, such facilities that store more than 500 waste tires onsite or that store 100 or more waste tires for more than 90 days are considered waste tire collection sites.)</p>
<p><b>SO.160.8.MS.</b> Waste tire processing facilities must use approved methods of processing waste tires (MDEQ, SW-4, Section D</p>	<p>Verify that waste tires are processed using one of the following acceptable methods:</p> <ul style="list-style-type: none"> <li>- slicing vertically, resulting in each waste tire being divided into at least two approximately equal donut-shaped halves</li> </ul>

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p>(2)) [Citation Revised May 2006].</p> <p><b>SO.160.9.MS.</b> Waste tire processing facilities must meet specific storage requirements (MDEQ, SW-4, Sections D (3) through (5)) [Citation Revised May 2006].</p> <p><b>SO.160.10.MS.</b> The disposal of waste tires at landfills, disposal sites, and monofills must meet specific requirements (MDEQ, SW-4, Section E (2)) [Revised May 1999; Revised May 2006].</p> <p><b>SO.160.11.MS.</b> Waste tire disposal sites must be permitted (MDEQ, SW-4, Section E (1)) [Revised May 1999; Citation Revised May 2006].</p> <p><b>SO.160.12.MS.</b> Landfill sites that monofill tires or dispose of tires with rubbish materials</p>	<ul style="list-style-type: none"> <li>- chopping or cutting into a minimum of four approximately equal pieces</li> <li>- shredding or chipping into multiple pieces</li> <li>- grinding into crumbs</li> <li>- other methods as approved by the Commission.</li> </ul> <p>Verify that the processing facility meets the storage requirements for waste tire collection sites for both waste and processed tires, excluding the maximum storage and storage time limitations.</p> <p>Verify that the processing facility does not accept waste tires for processing when it has reached its waste tire storage limit.</p> <p>(NOTE: The waste tire storage limit for processing facilities is established by the Department on a case by case basis and is no more than 7 times the daily through-put of the processing site. The processed tire storage limits is established by the Department on a case by case basis.)</p> <p>Verify that the waste tire processing facility does not exceed its processed tire storage limit.</p> <p>Verify that a solid waste landfill, approved rubbish disposal site, and/or approved waste tire monofill does not accept whole waste tires for disposal.</p> <p>Verify that existing rubbish landfills which intend to accept processed tires request authorization from the Department.</p> <p>(NOTE: Processed tires which meet the approved processing methods may be disposed of at sanitary landfills, approved rubbish disposal sites, and/or waste tire monofills.)</p> <p>Verify that waste tire disposal sites obtain a permit from the Mississippi Environmental Quality Permit Board.</p> <p>Verify that the monofill or rubbish disposal site meets the following operational requirements:</p>



<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p>must meet specific operational requirements (MDEQ, SW-4, Section E (4)) [Citation Revised May 2006].</p> <p><b>SO.160.13.MS.</b> Incineration units, pyrolysis systems, and other air emissions equipment which burn processed tires must meet specific requirements (MDEQ, SW-4, Section E (5)) [Citation Revised May 2006].</p> <p><b>SO.160.14.MS.</b> The use of waste tires for agriculture, erosion control, or other uses must meet specific requirements (MDEQ, SW-4, Section G) [Revised May 1999; Citation Revised May 2006].</p>	<ul style="list-style-type: none"> <li>- the active waste disposal area is covered with 6 in of dirt at least every 2 weeks</li> <li>- adequate fire prevention measures are taken at the site including notification of the local fire protection authorities and maintenance of an adequate dirt stockpile adjacent to the active disposal area as a fire extinguishment measure.</li> </ul> <p>(NOTE: The cover frequency may be increased or decreased by the Department.)</p> <p>Determine whether the facility operates incineration units, pyrolysis systems, and/or other air emissions equipment which burn processed tires.</p> <p>Verify that the facility meets the following requirements with regards to the storage of processed tires:</p> <ul style="list-style-type: none"> <li>- technical and operational standards for tires stored indoors and outdoors at waste tire collection sites</li> <li>- fire protection requirements for waste tire collection sites</li> <li>- action requirements in the event of a fire at a waste tire collection site</li> <li>- closure requirements for waste tire collection sites</li> <li>- processed tire storage requirements for waste tire processing facilities.</li> </ul> <p>Determine whether the facility burns whole waste tires.</p> <p>Verify that the facility meets all the requirements for waste tire collection sites (except minimum storage capacities) and the waste tire storage limits for waste tire processing facilities.</p> <p>Determine whether the facility uses waste tires for agriculture, erosion control, or other uses.</p> <p>Verify that the facility obtains Departmental approval to use waste tires for erosion control.</p> <p>Verify that the waste tires meet the processing requirements of SO.160.8.MS.</p> <p>Verify that waste/processed tires used for agricultural and erosion control purposes are stored/stockpiled while not in use in a manner that precludes mosquito breeding problems, rodent harborage, and potential fire hazards.</p> <p>Verify that waste/processed tires used for erosion control or other civil engineering purposes do not remain stockpiled for more than 90 days unless a</p>

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>SO.160.15.MS.</b> Waste tire generators must meet specific requirements for waste tire transportation (MDEQ, Office of Pollution Control, SW-5, Section C) [Added May 2006].</p>	<p>waste tire collection site permit is obtained.</p> <p>Verify that waste/processed tires used for agricultural or other approved purposes are, upon completion of use, deposited for disposal or recycling at a properly permitted waste tire collection site, waste tire processing facility, or waste tire disposal site.</p> <p>(NOTE: The Department may approve other uses of waste/processed tires upon a site specific basis provided that the user can demonstrate that the waste tires will be managed properly and will either result in a legitimate end use of the waste tire or proper disposal upon completion of the subject project.)</p> <p>Verify that a waste tire generator providing waste tires for transportation to a facility for storage, processing, disposal, or retreading/resale completes and sign a certification form as provided by the Department certifying the following:</p> <ul style="list-style-type: none"> <li>- the number of waste tires to be transported or in the event that the waste tires have been cut, chopped, sliced, shredded or otherwise processed into multiple pieces, the volume of processed waste tires to be transported</li> <li>- the county and state in which the tires were collected</li> <li>- the name and address of the waste tire processing, storage, disposal or retreading/resale facility for which the tires are destined.</li> </ul> <p>Verify that the waste tire generator retains a copy of the certification form signed by the waste tire generator and the waste tire transporter for at least 3 years.</p> <p>Verify that the waste tire generator only allows a registered waste tire hauler who possesses a valid identification number to collect and transport waste tires when one of the following applies:</p> <ul style="list-style-type: none"> <li>- 50 or more tires are transported</li> <li>- the transporter is compensated by the generator.</li> </ul> <p>(NOTE: This checklist item applies to waste tire generators, transporters, haulers, and the owners/operators of waste tire collection, processing and disposal sites concerning the transportation of waste tires in Mississippi, including instances where:</p> <ul style="list-style-type: none"> <li>- waste tires are transported into the State of Mississippi from out-of-state generators for the purposes of storage, processing, disposal, or retreading/resale in Mississippi, or for transportation through the State to destinations outside Mississippi</li> <li>- waste tires originating in Mississippi are transported outside the State for the purposes of storage, processing, disposal or retreading/resale in another state.</li> </ul> <p>These requirements do not apply to the transportation of reusable tires to</p>

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>SO.160.16.MS.</b> Waste tire transporters must meet specific requirements (MDEQ, Office of Pollution Control, SW-5, Section D) [Added May 2006].</p> <p><b>SO.160.17.MS.</b> Waste tire haulers must meet specific requirements to transport waste tires (MDEQ, Office of Pollution Control, SW-5, Section E) [Added May 2006].</p>	<p>facilities or businesses which process or sell such tires. However, all used tires are considered to be waste tires until the reusable tires have been specifically separated from the waste tires. Facilities or businesses which receive reusable and/or waste tires for purposes such as retreading or resale are not considered to be waste tire processing facilities; however, such facilities that store more than 500 waste tires on site, or that store 100 or more waste tires for more than 90 days, may be considered to be waste tire collection sites.)</p> <p>(NOTE: Certification requirements do not apply to:</p> <ul style="list-style-type: none"> <li>- tires that are provided for storage, processing, disposal or retreading/resale in quantities of 5 or less by a person other than a waste tire collector, waste tire processor, or waste tire hauler, or</li> <li>- tires transported within or into the State of Mississippi, where such tires were neither generated in the state nor destined for storage, processing, disposal, or retreading/resale in the state.</li> </ul> <p>(NOTE: See SO.160.15.MS. for applicability and exemptions.)</p> <p>Verify that a waste tire transporter completes and signs the certification form initially completed by the waste tire generator, certifying the receipt of waste tires from the waste tire generator.</p> <p>Verify that the waste tire transporter retains a copy of the completed certification form containing all signatures for at least 3 years.</p> <p>Verify that wastes tires are delivered to an appropriately authorized waste tire collection, processing, disposal site, at a retreading/resale facility or at another facility approved by the Department.</p> <p>Verify that a waste tire transporter who hauls 50 or more waste tires for storage, processing or disposal or who hauls tires for compensation obtains a valid identification number.</p> <p>(NOTE: See Definition for “waste tire hauler” and SO.160.15.MS. for applicability and exemptions.)</p> <p>Verify that any waste tire hauler transporting waste tires within or into the state registers with the Department of Environmental Quality and obtains a waste tire hauler identification number.</p> <p>Verify that the identification number is maintained at all times on all vehicles used to transport waste tires.</p> <p>Verify that a waste tire hauler records and maintains for 3 years the following</p>

<b>COMPLIANCE CATEGORY:</b> <b>SOLID WASTE MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>SO.160.18.MS.</b> The owner operator of waste tire collection, processing, or disposal site, retreading/resale facility, or other facility approved to accept waste tires must meet specific requirements (MDEQ, Office of Pollution Control, SW-5, Section F) [Added May 2006].</p>	<p>information regarding its activities for each 3 month period of operation:</p> <ul style="list-style-type: none"> <li>- the approximate quantity of waste tires hauled</li> <li>- where or from whom the waste tires were received</li> <li>- where the waste tires were deposited.</li> </ul> <p>Verify that waste tire haulers submit to the Department an annual report that summarizes the information collected for the previous calendar year.</p> <p>(NOTE: Record and report requirements do not apply to waste tire haulers when the tires being transported are neither generated in the state nor destined for storage, processing, disposal, or retreading/resale in the state.)</p> <p>(NOTE: See SO.160.15.MS. for applicability and exemptions.)</p> <p>Verify that accept waste tires are not accepted unless the waste tire transporter provides a certification form that has been completed and signed by both the waste tire generator and transporter.</p> <p>Verify that a copy of the form containing all signatures is retained for at least 3 years.</p> <p>Verify that 50 or more waste tires are not accepted from any person unless the transporter is a registered waste tire hauler who possesses a valid identification number.</p>

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>SO.165.</b></p> <p><b>YARD WASTE/ COMPOSTING</b></p> <p><b>SO.165.1.MS.</b> Specific types of composting facilities must operate under a permit or a certificate of coverage of a general permit (MDEQ, SW-2, Section IX: A (1) through (3) and F (1)) [Revised May 2006].</p> <p><b>SO.165.2.MS.</b> Composting facilities that process less than 25 tons/day of only yard waste or rubbish must meet specific operational requirements (MDEQ, SW-2, Section IX: C) [Citation Revised May 2006].</p> <p><b>SO.165.3.MS.</b> Composting facilities that process 25 tons/day or more of only yard waste or rubbish must meet</p>	<p>Verify that the composting facility operates under an individual permit or a certificate of coverage of a general permit.</p> <p>Verify that the facility submits a notification that demonstrates that the facility will meet all applicable requirements.</p> <p>Verify that the type of waste processed includes the following:-</p> <ul style="list-style-type: none"> <li>- yard waste or rubbish only</li> <li>- sewage sludge</li> <li>- household garbage or other solid waste.</li> </ul> <p>(NOTE: The requirements of this composting section are not applicable to backyard composting and the resulting compost, backyard vermicomposting and the resulting compost, and normal farming operations.)</p> <p>Verify that an attendant is onsite when the facility is open to the general public.</p> <p>Verify that nonbiodegradable bags, as well as all unauthorized waste materials are removed from the compost and stored in appropriate containers for ultimate disposal or management at an approved facility.</p> <p>Verify that open burning of solid waste, except for land clearing debris generated on the site, is prohibited.</p> <p>Verify that immediate action is taken to extinguish any accidental fire, and the Department is notified as soon as possible.</p> <p>(NOTE: The requirements of this composting section are not applicable to backyard composting and the resulting compost, backyard vermicomposting and the resulting compost, and normal farming operations.)</p> <p>Verify that an attendant is onsite when the facility is open to the general public.</p> <p>Verify that nonbiodegradable bags, as well as all unauthorized waste materials, are removed from the compost and stored in appropriate containers for ultimate</p>

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p>specific operational requirements (MDEQ, SW-2, Section IX: D) [Citation Revised May 2006; Citation Revised March 2007].</p>	<p>disposal or management at an approved facility.</p> <p>Verify that the open burning of solid waste, except for land clearing debris generated on the site of the facility, is prohibited.</p> <p>Verify that immediate action is taken to extinguish any accidental fire, and the Department is notified as soon as possible.</p> <p>Verify that compost offered for use is produced by a process that encompasses turning on a regular basis to aerate the waste, maintain temperatures, and/or reduce pathogens.</p> <p>Verify that surface water drainage is diverted around and away from the composting area and controlled to prevent any washing or escape of the waste from the property.</p> <p>(NOTE: If the Department deems it necessary, a leachate collection and treatment system may be required.)</p> <p>Verify that an annual report is submitted to the Department no later than 60 days after the calendar year and includes information on the preceding calendar year.</p> <p>(NOTE: The requirements of this composting section are not applicable to backyard composting and the resulting compost, backyard vermicomposting and the resulting compost, and normal farming operations.)</p>
<p><b>SO.165.4.MS.</b> Compost facilities that process household garbage and/or wastewater sludge, or other solid waste with similar properties or characteristics, must meet specific design requirements (MDEQ, SW-2, Section IX: E (1)) [Citation Revised May 2006].</p>	<p>Verify that surface water drainage is diverted around and away from the composting area and controlled to prevent any escape of waste from the property.</p> <p>Verify that washdown water, leachate, and any other contaminated water generated in the facility other than domestic wastewater is directed to sumps for use within the process.</p> <p>Verify that no discharge of contaminated water occurs unless specifically allowed by the issuance of a wastewater permit.</p> <p>Verify that the receiving area and composting area of facilities which process household garbage are covered with a roof capable of preventing rainfall from directly contacting the waste or compost.</p> <p>(NOTE: Final curing areas are not required to be roofed.)</p> <p>(NOTE: The requirements of this composting section are not applicable to backyard composting and the resulting compost, backyard vermicomposting and</p>

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>SO.165.5.MS.</b> Composting facilities that process household garbage and/or wastewater sludge, or other solid waste with similar properties or characteristics, as determined by the Department, must meet specific operational requirements (MDEQ, SW-2, Section IX: E(2)) [Citation Revised May 2006].</p>	<p>the resulting compost, and normal farming operations.)</p> <p>Verify that the individual(s) responsible for making the decisions critical to the composting process, such as turning, wetting, and screening, have a knowledge of the biological processes at work and the expertise and knowledge capable of operating the facility in compliance with this section.</p> <p>Verify that all waste delivered to the facility is confined to a designated delivery or receiving area.</p> <p>Verify that facilities which receive household garbage process the waste within 72 h or remove and dispose of it in another appropriate facility.</p> <p>Verify that access to the facility is controlled by a fence and gate or enclosed buildings.</p> <p>Verify that all access points are secured whenever the facility is not open for business or when no authorized personnel are onsite.</p> <p>Verify that residuals and recyclables are stored in a manner that prevents vector intrusion and aesthetic degradation.</p> <p>Verify that recyclables are removed at least annually, and nonrecyclables residuals are removed at least weekly.</p> <p>Verify that the following operating conditions are met, unless the Permit Board authorizes differently:</p> <ul style="list-style-type: none"> <li>- where the windrow method of composting is utilized <ul style="list-style-type: none"> <li>- a temperature of at least 55 Degrees C is maintained in the windrow for at least 3 weeks</li> <li>- aerobic conditions are maintained during the compost process</li> <li>- the windrow is turned at least twice weekly during the 3-week period</li> </ul> </li> <li>- where the static aerated pile method of composting is utilized <ul style="list-style-type: none"> <li>- a temperature of at least 55 Degrees C is maintained for at least 7 days</li> <li>- aerobic conditions are maintained during the compost process</li> </ul> </li> <li>- where the in-vessel method of composting is utilized <ul style="list-style-type: none"> <li>- retention time in the vessel is at least 24 h with the temperature maintained at 55 Degrees C or higher</li> <li>- a stabilization period of at least 7 days follows the minimum retention period</li> <li>- temperature in the compost pile is maintained at least at 55 Degrees C for at least 3 days during the stabilization period.</li> </ul> </li> </ul> <p>(NOTE: The requirements of this composting section are not applicable to</p>

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>SO.165.6.MS.</b> Composting facilities that process household garbage and/or wastewater sludge, or other solid waste with similar properties or characteristics, as determined by the Department, must meet specific testing and monitoring requirements (MDEQ, SW-2, Section IX: E(3) (a) through (h)) [Citation Revised May 2006].</p>	<p>backyard composting and the resulting compost, backyard vermicomposting and the resulting compost, and normal farming operations.)</p> <p>Verify that records are maintained at the facility of the quantity of incoming waste, residuals and recyclables, and the quantity and quality of compost produced.</p> <p>Verify that a composite sample of the compost produced is taken and analyzed at intervals of every 20,000 tons of compost produced or every 3 mo, whichever comes first.</p> <p>Verify that the tests in Appendix 9-1 are conducted.</p> <p>Verify that a fecal coliform count is conducted before and after decomposition where sewage sludge is composted.</p> <p>(NOTE: The Permit Board may require additional or fewer test parameters or may increase or decrease the frequency of analysis.)</p> <p>Verify that the composite samples of the compost consist of at least five individual samples of equal volume taken from separate areas along the side of each pile of compost at a depth of 2 ft into the pile from the outside surface.</p> <p>Verify that analytical methods for all tests are approved by the USEPA or the Department.</p> <p>Verify that the reduction in organic matter required in testing is determined by comparing the organic matter content of the feedstock and the organic matter content of the compost product using the formula in Appendix 9-2.</p> <p>(NOTE: The requirements of this composting section are not applicable to backyard composting and the resulting compost, backyard vermicomposting and the resulting compost, and normal farming operations.)</p>
<p><b>SO.165.7.MS.</b> Composting facilities that process household garbage and/or wastewater sludge, or other solid waste with similar properties or characteristics, as determined by the Department, must meet specific recordkeeping and reporting requirements</p>	<p>Verify that records of required analytical testing and monitoring are maintained for a period of at least 5 yr.</p> <p>Verify that an annual report is submitted to the Department no later than 60 days after the calendar year.</p> <p>(NOTE: The requirements of this composting section are not applicable to backyard composting and the resulting compost, backyard vermicomposting and the resulting compost, and normal farming operations.)</p>



<b>COMPLIANCE CATEGORY:</b> <b>SOLID WASTE MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p>(MDEQ, SW-2, Section IX: E(3)(i) and (k)) [Citation Revised May 2006].</p> <p><b>SO.165.8.MS.</b> Compost must meet classification and distribution requirements (MDEQ, SW-2, Section IV: F (2) and G) [Citation Revised May 2006].</p>	<p>Determine whether the compost is classified as Class I, Class II, Class III, Class IV, or Class V compost (see definitions).</p> <p>Verify that the compost is distributed according to its class and in the following manner:</p> <ul style="list-style-type: none"> <li>- Class I or Class II compost has unrestricted distribution</li> <li>- Class III or Class IV compost is restricted to use by commercial, agricultural, institutional, or governmental operations</li> <li>- Class V compost can only be used as landfill cover with specific approval of the Department</li> <li>- compost which cannot be processed to meet the definition of one of the classes of compost is disposed of in a facility approved by the Department.</li> </ul> <p>(NOTE: Where contact with the general public is likely, such as in a park, Class III compost can be used but Class IV cannot.)</p> <p>Verify that persons who receive compost classified as Class II, III, or IV for distribution of use are provided with a release form.</p> <p>Verify that the maximum allowable compost application rate (MACAR) is computed according to the information in Appendix 9-3, and is provided on the release form.</p> <p>Verify that no person who applies or uses compost on land within the state of Mississippi, other than for landfill cover, does so in a manner that exceeds the maximum allowable metal application rates (MAMARs) described in Appendix 9-4.</p> <p>(NOTE: For applications where repeated use of the compost is not expected, such as land reclamation or as a soil amendment on highway right-of-ways, requests for higher application rates may be made in writing to the Department.)</p> <p>(NOTE: The requirements of this composting section are not applicable to backyard composting and the resulting compost, backyard vermicomposting and the resulting compost, and normal farming operations.)</p>

<p align="center"><b>COMPLIANCE CATEGORY:</b>  <b>SOLID WASTE MANAGEMENT</b>  <b>Mississippi Supplement</b></p>	
<p align="center"><b>REGULATORY REQUIREMENTS:</b></p>	<p align="center"><b>REVIEWER CHECKS:</b>  <b>March 2010</b></p>
<p><b>SO.175.</b></p> <p><b>OTHER TREATMENT/ PROCESSING UNITS</b></p> <p><b>SO.175.1.MS.</b> [Deleted June 1998].</p> <p><b>SO.175.2.MS.</b> Processing facilities must meet all applicable Federal and state air emission and wastewater discharge laws and regulations (MDEQ, SW-2, Section VII: B and D) [Citation Revised May 2006].</p> <p><b>SO.175.3.MS.</b> Surface drainage in and around the processing facility must be controlled (MDEQ, SW-2 Section VII: C) [Citation Revised May 2006].</p> <p><b>SO.175.4.MS.</b> Processing facilities must ensure the health, safety, and aesthetic aspects of the community (MDEQ, SW-2, Section VII: E) [Citation Revised May 2006].</p> <p><b>SO.175.5.MS.</b> Processing facilities must meet operational requirements (MDEQ, SW-2, Section VII: F and G) [Citation Revised</p>	<p>(NOTE: See SO.5.4.MS.)</p> <p>Verify that the processing facility meets all applicable Federal and state air emission and wastewater discharge laws and regulations.</p> <p>Verify that any liquids accumulated at the facility, including leachate, washwater, or contaminated rainfall runoff, are controlled in a manner that will prevent obnoxious odors and pollution of waters of the state.</p> <p>Verify that surface drainage in and around the facility is controlled to minimize surface water runoff onto, into, and off the treatment area.</p> <p>Verify that practices are followed to ensure the health, safety, and aesthetic aspects of the community are not endangered by the location and operation of a solid waste processing facility.</p> <p>(NOTE: Depending upon the specific solid waste handling or processing operation involved, several of the operational standards prescribed for solid waste landfill sites may be applicable and shall be followed, if appropriate.)</p> <p>Verify that the facility does not accumulate solid waste in quantities that cannot be processed within enough time to preclude the creation of objectionable odors, fly breeding, or harboring of other vectors.</p> <p>Verify that, if such accumulations occur, additional solid waste will not be</p>

<b>COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p>May 2006].</p> <p><b>SO.175.6.MS.</b> Processing facilities that are not completely enclosed must minimize windblown litter (MDEQ, SW-2, Section VII: H) [Citation Revised May 2006].</p> <p><b>SO.175.7.MS.</b> Processing facilities must provide fire protection (MDEQ, SW-2 Section VII: I) [Citation Revised May 2006].</p>	<p>received until the adverse conditions are abated.</p> <p>Verify that steps are taken to remove the accumulated solid waste from the site to an approved backup processing or disposal facility if a significant work stoppage should occur at the facility due to a mechanical breakdown or other cause and it is anticipated to last long enough to create objectionable odors, fly-breeding, or harborage of vectors.</p> <p>Verify that all working surfaces that come in contact with wastes are washed down on a daily basis at the completion of processing.</p> <p>Verify that systems operating on a continuous basis are washed down a minimum of once each 24-h cycle.</p> <p>Verify that, if a facility is not completely enclosed, wire or other fencing or screening are provided to minimize windblown materials.</p> <p>Verify that litter resulting from the operation is collected and returned to the processing area as frequently as necessary to minimize unsightly conditions and fire hazards.</p> <p>Verify that open burning of solid waste, except for land clearing debris generated on the site of the facility, is not done.</p> <p>Verify that there is an adequate supply of water under pressure at the site, an adequate stockpile of earth reasonably close to the processing area is provided, or there is a nearby organized Fire Department providing service when called.</p> <p>(NOTE: The Department may approve alternate methods of fire protection or waive this requirement when there is no need for fire protection.)</p> <p>Verify that the facility takes immediate action to extinguish any fire and promptly notifies the Department if an accidental fire occurs.</p>

## Appendix 9-1

### Composting Facility Tests

(Source: MDEQ, SW-2, Section IX: E (3) (b)) [Citation Revised May 2006]

Parameter	Units to be expressed
Moisture	percent
Total Nitrogen (as N)	percent dry weight
Ammonia Nitrogen (as N)	percent dry weight
Nitrate Nitrogen (as N)	percent dry weight
Total Phosphorous	percent dry weight
Total Potassium	percent dry weight
Organic Matter	percent dry weight
Reduction in Organic Matter	percent
PH	standard units
Arsenic, Total	mg/kg dry weight
Arsenic, TCLP*	ppm
Barium, Total	mg/kg dry weight
Barium, TCLP	ppm
Cadmium, Total	mg/kg dry weight
Cadmium, TCLP	ppm
Chromium, Total	mg/kg dry weight
Chromium, TCLP	ppm
Copper, Total	mg/kg dry weight
Lead, Total	mg/kg dry weight
Lead, TCLP	ppm
Mercury, Total	mg/kg dry weight
Mercury, TCLP	ppm
Nickel, Total	mg/kg dry weight
Selenium, Total	mg/kg dry weight
Selenium, TCLP	ppm
Silver, Total	mg/kg dry weight
Silver, TCLP	ppm
Zinc, Total	mg/kg dry weight
* TCLP: Toxic Characteristics Leaching Procedure	

## Appendix 9-2

### Reduction in Organic Matter Formula for Composting Facilities

(Source: MDEQ, SW-2, Section IX: E (3) (h)) [Citation Revised May 2006]

The reduction in organic matter required for compost testing is determined by comparing the organic matter content of the feedstock and the organic matter content of the compost product using the following calculation:

$$\text{percent ROM} = \left[ 1 - \frac{\text{OMP} (100 - \text{OMF})}{\text{OMF} (100 - \text{OMP})} \right] \times 100$$

where:

percent ROM = reduction in organic matter

OMF = percentage of organic matter of the feedstock (before decomposition)

OMP = percentage of organic matter of the compost product (after decomposition).

### Appendix 9-3

#### Maximum Allowable Compost Application Rate (MACAR) of Compost

(Source: MDEQ, SW-2 Section IX: G (6)) [Citation Revised May 2006]

The MACAR is computed according to the following equation:

$$[\text{MACAR}]_M = \frac{[\text{MAMAR}]_M}{[\text{CONC}]_M \times 10^{-6} \times 2000}$$

where:

$[\text{MACAR}]_M$  = maximum allowable compost application rate, in tons/acre/yr, based upon the specific metals listed in Appendix 9-4.

$[\text{MAMAR}]_M$  = maximum allowable metal application rate, in lb/acre/yr, for each of the metals listed in Appendix 9-4.

$[\text{CONC}]_M$  = the total metal concentration, in mg/kg dry weight, for each of the metals listed in Appendix 9-4.

#### Appendix 9-4

**Maximum Allowable Metal Application Rates (MAMARs) for Compost**  
(Source: MDEQ, SW-2, Section IX: G (7) (a)) [Citation Revised May 2006]

<b>Metal</b>	<b>MAMAR (lb/acre/yr)</b>
Cadmium	0.45
Copper	11.1
Lead	44.5
Nickel	11.1
Zinc	22.2

## Appendix 9-5

### Maximum Allowable Metal Application Rates (MAMARs) for Compost

(Source: MDEQ, SW-2, Section IX: G(7)(a))

#### Section III. Beneficial Use Categories.

A. Category I uses are uses that have a Standing Use Determination that has been approved by the Department. Category I uses must fulfill the following conditions:

1. Category I uses must be consistent with one of the following Standing Use Determinations approved by the Department:
  - a. Uses of uncontaminated and untreated wood, wood chips, bark, or sawdust where such materials are used as mulch, landscaping, animal bedding, wood fuel production, bulking agents or additives at a permitted composting facility, or other directly comparable uses.
  - b. Rubbish that is legitimately used, reused, recycled or reclaimed, except for rubbish wastes which is composted or which, due to its chemical or physical constituency, would result in an endangerment to the environment or the public wealth, safety, or welfare.
  - c. Uses consistent with and approved under the conditions of the Mississippi Waste Tire Management Regulations as they pertain to the beneficial use of waste tires or waste tire derived materials;
  - d. Contained uses in a regulated environmental system that the Department regulates through an existing permit, order, or regulation. Such uses may include stabilization or solidification of a solid waste for ultimate disposal in a municipal solid waste landfill, alternate cover uses in a municipal solid waste landfill or other type disposal facility, construction uses within a lined landfill cell and other similar uses as determined by the Department;
  - e. Uses in which a by-product is utilized as a contained and/or encapsulated additive in the manufacture of a product; or
  - f. Other uses which have been sufficiently demonstrated by the owner, distributor or supplier or user and subsequently approved by the Department for a Standing Use Determination.
2. The by-product must satisfy Section II.A of these regulations regarding eligibility requirements.
3. For Category I uses, the generator/distributor shall be exempt from the requirements of Sections II.B and IV of these regulations.

B. Category II uses are uses in which the by-product is utilized in engineered construction or other civil engineering uses. Category II determined uses must fulfill the following conditions:

1. The by-product must satisfy Section II.A of these regulations regarding eligibility requirements.
2. An applicant must comply with Section II.B of these regulations for the Department's consideration of a proposed beneficial use.
3. By-Product Characterization--A by-product must be adequately characterized to ensure that the use of the material does not cause environmental or public health problems. At a minimum, the characterization must include a demonstration of the following:
  - a. The applicant must conduct an appropriate analysis of the by-product that identifies the primary chemical constituents and demonstrates the physical characteristics of the material and must submit that analytical data with the application for beneficial use.
  - b. The by-product should not contain constituents that exceed the Beneficial Use Characteristic Standard of Table A in Appendix 1 for the following metals: Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver. Where a constituent(s) in the by-product exceeds a Table A standard, the constituent(s) should be analyzed by the Toxicity Characteristic Leaching Procedure (TCLP) to confirm that the material does not exceed the leachability standards of Table B in Appendix 1. The Department may consider the use of an alternate leaching test, upon the written request and demonstration by the applicant that the alternate test provides a comparable and appropriate analysis for the use proposed.



- c. The Department may establish additional constituent standards for a byproduct or may require that the applicant conduct an appropriate risk assessment of the by-product, depending upon the process generating the by-product. In such cases, the additional constituents must be analyzed and reported to the Department.
- d. Where a by-product does not meet an established beneficial use standard as described in Sections B.3.b and B.3.c, the applicant may propose an alternate demonstration to the Department of the suitability of the by-product, based on an appropriate contaminant risk assessment of the material.
- 4. The registrant of the by-product must have the certification of a professional engineer licensed in the State of Mississippi that the by-product has physical or chemical properties suitable for the proposed construction or civil engineering use. Where ASTM standards or other recognized standards exist relating to the proposed use, the by-product must comply with those standards.
- 5. Where appropriate, the Department may adopt written best management practices for more common construction or civil engineering uses of by-products in the state. Upon the development of such best management practices, the registrant must provide a written copy to the end user or users at the point of sale or distribution of the by-product.

C. Category III determined uses are uses in which the by-product is utilized as a soil amendment, soil amendment additive, or direct application to the land. Category III determined uses must fulfill the following conditions:

- 1. The by-product must satisfy Section II.A of these regulations regarding eligibility requirements.
- 2. An applicant must comply with Section II.B of these regulations for the Department's consideration of a proposed beneficial use.
- 3. By-Product Characterization -- A by-product must be adequately characterized to ensure that the proposed use of the material does not cause environmental or public health problems. At a minimum, the characterization must include a demonstration of the following:
  - a. The applicant must conduct an appropriate analysis of the by-product that identifies the primary chemical constituents and demonstrates the physical characteristics of the material and must submit that analytical data with the application for beneficial use.
  - b. The by-product should not contain constituents that exceed the Beneficial Use Characteristic Standard of Table A in Appendix 1 for the following metals: Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver. Where a constituent(s) in the by-product exceeds a Table A standard, the constituent(s) should be analyzed by the Toxicity Characteristic Leaching Procedure (TCLP) to confirm that the material does not exceed the leachability standards of Table B in Appendix 1. The Department may consider the use of an alternate leaching test, upon the written request and demonstration by the applicant that the alternate test provides a comparable and appropriate analysis for the use proposed.
  - c. The pollutant concentrations of a by-product proposed for Category III determined uses should not exceed the secondary soil amendment constituent standards in Appendix 2.
  - d. The Department may establish additional constituent standards for a by-product or may require that the applicant conduct an appropriate risk assessment of the by-product, depending upon the process generating the by-product. In such cases, the additional constituents must be analyzed and reported to the Department.
  - e. Where a by-product does not meet an established beneficial use standard as described in Sections C.3.b and C.3.c, the applicant may propose an alternate demonstration to the Department of the suitability of the by-product, based on an appropriate contaminant risk assessment of the material.
- 4. A supplier or distributor must advise end users of the by-product in writing of the acceptable agronomic rate of application and agronomic practices for use of the by-product. Where appropriate, the Department may adopt written best management practices for more common soil amendment uses of by-products in the state. Upon the development of such best management practices, the registrant must provide a written copy to the end user or users at the point of sale or distribution of the by-product.
- 5. Prior to a Category III use of the by-product, the applicant must apply for and obtain proper certification from the Mississippi Department of Agriculture and Commerce (MDAC) for the use of the proposed material as a soil amendment, where applicable.

D. Category IV determined uses are all other miscellaneous uses that do not fall into one of the preceding categories. Such uses must fulfill the following conditions:

1. The by-product must satisfy Section II.A of these regulations regarding eligibility requirements.
2. An applicant must comply with Section II.B of these regulations for the Department's consideration of a proposed beneficial use.
3. Based upon the conditions of the proposed use, the Department may require that the applicant comply with part or all of the conditions in Sections III.B or III.C of these regulations.

## **Appendix 9-6**

### **Beneficial Use Categories**

(Source: MDEQ, SW-9, Section III) [Added May 2006]

#### Section III. Beneficial Use Categories.

A. Category I uses are uses that have a Standing Use Determination that has been approved by the Department. Category I uses must fulfill the following conditions:

1. Category I uses must be consistent with one of the following Standing Use Determinations approved by the Department:
  - a. Uses of uncontaminated and untreated wood, wood chips, bark, or sawdust where such materials are used as mulch, landscaping, animal bedding, wood fuel production, bulking agents or additives at a permitted composting facility, or other directly comparable uses.
  - b. Rubbish that is legitimately used, reused, recycled or reclaimed, except for rubbish wastes which is composted or which, due to its chemical or physical constituency, would result in an endangerment to the environment or the public wealth, safety, or welfare.
  - c. Uses consistent with and approved under the conditions of the Mississippi Waste Tire Management Regulations as they pertain to the beneficial use of waste tires or waste tire derived materials;
  - d. Contained uses in a regulated environmental system that the Department regulates through an existing permit, order, or regulation. Such uses may include stabilization or solidification of a solid waste for ultimate disposal in a municipal solid waste landfill, alternate cover uses in a municipal solid waste landfill or other type disposal facility, construction uses within a lined landfill cell and other similar uses as determined by the Department;
  - e. Uses in which a by-product is utilized as a contained and/or encapsulated additive in the manufacture of a product; or
  - f. Other uses which have been sufficiently demonstrated by the owner, distributor or supplier or user and subsequently approved by the Department for a Standing Use Determination.

B. Category II uses are uses in which the by-product is utilized in engineered construction or other civil engineering uses. Category II determined uses must fulfill the following conditions:

1. The registrant of the by-product must have the certification of a professional engineer licensed in the State of Mississippi that the by-product has physical or chemical properties suitable for the proposed construction or civil engineering use. Where ASTM standards or other recognized standards exist relating to the proposed use, the by-product must comply with those standards.

C. Category III determined uses are uses in which the by-product is utilized as a soil amendment, soil amendment additive, or direct application to the land. Category III determined uses must fulfill the following conditions:

1. The pollutant concentrations of a by-product proposed for Category III determined uses should not exceed the secondary soil amendment constituent standards in Appendix 2.
2. A supplier or distributor must advise end users of the by-product in writing of the acceptable agronomic rate of application and agronomic practices for use of the by-product. Where appropriate, the Department may adopt written best management practices for more common soil amendment uses of by-products in the state. Upon the development of such best management practices, the registrant must provide a written copy to the end user or users at the point of sale or distribution of the by-product.
3. Prior to a Category III use of the by-product, the applicant must apply for and obtain proper certification from the Mississippi Department of Agriculture and Commerce (MDAC) for the use of the proposed material as a soil amendment, where applicable.

D. Category IV determined uses are all other miscellaneous uses that do not fall into one of the preceding categories. Such uses must fulfill the following conditions:

1. Based upon the conditions of the proposed use, the Department may require that the applicant comply with part or all of the conditions in Sections III.B or III.C of these regulations.



**SECTION 10**  
**STORAGE TANK MANAGEMENT**  
**Mississippi Supplement, March 2010**

This section covers the state requirements for Storage Tank Management and is intended to supplement the TEAM Guide. Refer to the TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

**Mississippi UST Regulations**

Mississippi has not formally adopted the Federal regulations for underground storage tanks (USTs) in Title 40 of the Code of Federal Regulations, Part 280 (40 CFR 280), the state regulations (Department of Environmental Quality, Underground Storage Tanks Regulations, UST-2). Changes from the Federal requirements are included in the protocol.

**Definitions**

- *Alter* - the correction or modification of a UST system, including but not limited to the replacement of piping, valves, fill pipes or vents and any repairs to the tank (MDEP, Underground Storage Tanks Regulations, UST-3) [Added May 2006].
- *Ancillary Equipment* - any devices including, but not limited to, such devices as piping, fittings, flanges, valves, dispensers, and pumps used to distribute, meter, or control the flow of regulated substances to and from an UST (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].
- *Certificate of Registration* - a document identifying an underground storage tank facility as being registered with MDEQ and having paid all of the tank regulatory fees for the time period indicated on the certificate. The Certificate of Registration will be issued annually upon payment of tank regulatory fees and is valid only for the fiscal year in which it was issued. The Certificate of Registration must be conspicuously displayed at the facility (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].
- *Containment Sump* - a secondary containment device installed underneath a dispenser, at the tank or along a piping system designed to prevent leaks from the dispenser, submersible pump, piping connectors, fittings or other UST system ancillary components from reaching the environment (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].
- *Dispenser* - a device located above ground that meters the amount of regulated substances transferred to a point of use outside of the UST system, such as a motor vehicle. This definition does not include the "hanging hardware" (breakaways, hoses, nozzles) associated with the dispenser (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].
- *Dispenser - replace* means to remove an existing dispenser and install another dispenser in its place and the equipment used to connect the dispenser to the piping is also replaced. The equipment necessary to connect the dispensers may include check valves, shear valves, risers, flexible connectors or other transitional components that are beneath the dispenser and connect the dispenser to the piping. The replacement dispensers may be new or may have been used before (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].
- *Dispensers* - a new dispenser is one that is installed where there previously was no dispenser. The dispenser may be one that has never been used before or may be one that has been previously used (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].

- *Existing Tank System* - a tank system used to contain an accumulation of regulated substances or for which installation has commenced on or before December 22, 1988. For purposes of determining whether or not secondary containment is required, an existing tank system means a tank system used to contain an accumulation of regulated substances for which installation has commenced before October 1, 2008. Installation is considered to have commenced if:
  1. the owner or operator has obtained all federal, state, and local approvals or permits necessary to begin physical construction of the site or installation of the tank system; and if,
    - a. Either a continuous on-site physical construction or installation program has begun; or
    - b. The owner or operator has entered into contractual obligations--which can not be cancelled or modified without substantial loss--for physical construction at the site or installation of the tank system to be completed within a reasonable time (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].
- *Expediently Emptied* - that any accumulation of regulated substances in a UST is removed within 24 hours or another time frame determined by MDEQ to be reasonable (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].
- *Install or Installation* - the work involved in placing an underground storage tank system or any part thereof in the ground and preparing it to be placed in service (MDEP, Underground Storage Tanks Regulations, UST-3) [Added May 2006].
- *Interstitial Monitoring* - a method of monitoring the interstitial space of a secondarily contained UST system for a leak of regulated substances or ingress of external fluids (groundwater or other fluids not intended as monitoring fluids) (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].
- *Interstitial Space* - the opening formed between the primary (inner) and secondary (outer) wall of a UST system with double-walled construction or the opening formed between the wall of a containment sump and the UST system component that it contains (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].
- *Leak* - any spilling, leaking, emitting, discharging, escaping, leaching or disposing from an UST system or resulting from the operation of the UST system. A leak may or may not result in a release to the environment. A leak from a single-walled UST system will normally result in a release to the environment. A leak from the primary containment of a secondarily contained UST system may or may not result in a release to the environment depending upon the integrity of the secondary containment (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].
- *MDEQ* - the Mississippi Department of Environmental Quality (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].
- *New Tank System* - a tank system that will be used to contain an accumulation of regulated substances and for which installation has commenced after December 22, 1988. (See also "Existing Tank System.") This term applies to underground tanks, piping, dispensers, and submersible pumps (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].
- *Permanent Closure* - the physical removal of an underground storage tank system or the closure of an underground storage tank system in place (MDEP, Underground Storage Tanks Regulations, UST-3) [Added May 2006].
- *Pipe* - a new pipe is one that is installed where there previously was no pipe. It may be an entirely new piping run from the tank to the dispensers or it may be a new section of pipe added to an existing pipe. The new piping can not have been previously used (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].

- *Pipe* - replace means to remove an existing pipe and install another pipe in its place. In order to be considered a piping replacement, one hundred (100) percent of the piping, excluding connectors, needed to transfer the regulated substance from a single tank to the most distant dispenser or end use device must be removed and replaced. Connectors include any flexible connectors, risers or other transitional components such as fittings. The replacement piping must be new from the factory and can not have been previously used (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].
- *Pipe or Piping* - a hollow cylinder or tubular conduit that is constructed of non-earthen materials that routinely contains and conveys regulated substances from the underground storage tank to the dispenser or other end-use equipment. Such piping includes any elbows, couplings, unions, valves, or other in-line fixtures that routinely contain and convey regulated substances. This definition does not include vent, vapor recovery, fill lines or tank risers (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].
- *Release* - a leak from an UST system or resulting from the operation of the UST system that reaches the environment (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].
- *Release Detection* - determining whether a leak of a regulated substance that has occurred from the UST system has reached the environment (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].
- *Remove or Removal* - permanent closure (MDEP, Underground Storage Tanks Regulations, UST-3) [Added May 2006].
- *Repair* - to restore a tank or UST system component that has caused a leak of product from the UST system. As it applies to the integrity of underground storage tanks and piping, repair means any activity intended to restore a UST system to operation that does not meet the definition of replace (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].
- *Replace* - this term applies to underground tanks, piping, dispensers, and submersible pumps (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].
- *Secondary Containment* - an impervious layer or barrier that extends around the primary (inner) tank or pipe that is designed, constructed and installed to contain any leak from any part of the tank or piping that routinely contains regulated substances. Examples of secondarily contained systems include double-walled or jacketed tanks, double-walled or jacketed piping and/or containment sumps that may be installed at the top of the tanks, under dispensers or at piping transitions. Secondary containment must be designed, constructed and installed to:
  1. Prevent the release of regulated substances to the environment for the operational life of the secondary containment system;
  2. Prevent the ingress of water or other external fluids into the interstitial space for the operational life of the secondary containment system;
  3. Allow for monitoring of the interstitial space to detect any leak from the primary tank system and ingress of external fluids;
  4. Be checked for evidence of a leak and ingress of external fluids at least once every 30 days in accordance with §280.43(g) and §280.44(c); and
  5. Be compatible with the substances stored and external soil/fluids for the operational life of the secondary containment system (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].
- *Submersible Pump* - a new submersible pump is one that is installed where there previously was no submersible pump. The submersible pump may be one that has never been used before or may be one that has been previously used (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].
- *Submersible Pump* - replace means to remove an existing submersible pump and install another submersible pump in its place and the equipment used to connect the submersible pump is also replaced. The equipment needed to connect the submersible pump may include ball valves, check valves, flexible connectors unions, tees, ells or other pipe fittings and transitional components that connect the submersible pump to the piping. The



replacement submersible pump may be new or may have been used before (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].

- *Submersible Pump or Submerged Turbine Pump* - a device installed within a tank designed to transfer product from the tank to the dispenser in a pressurized piping system. The term submersible pump includes the submersible motor, extractor assembly and the pump head (housing) assembly (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].
- *Underground Tank* - a new tank is one that is installed where there previously was no tank. The tank may be one that has never been used before or may be one that has been previously used but recertified by the manufacturer (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].
- *Underground Tank* - replace means to remove an existing tank and install another tank in its place. The replacement tank may be one that has never been used or one that has been used but recertified by the manufacturer (MDEP, Underground Storage Tanks Regulations UST-2) [Added March 2009].

**STORAGE TANK MANAGEMENT  
GUIDANCE FOR MISSISSIPPI CHECKLIST USERS**

**REFER TO CHECKLIST ITEMS:**

Missing Checklist Items	ST.2.1.MS.
UST - State Specific	ST.30.1.MS.
New or Upgraded USTs	ST.35.1.MS. through ST.35.3.MS.
UST Filling	ST.45.1.MS. and ST.45.2.MS.
UST Repairs	ST.55.1.MS.
UST Connected to Emergency Generators	ST.75.1.MS.
Deferred USTs	ST.85.1.MS.
UST Documentation	ST.90.1.MS.

<b>COMPLIANCE CATEGORY:</b> <b>STORAGE TANK MANAGEMENT</b> <b>State Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>ST.2.</b></p> <p><b>MISSING CHECKLIST ITEMS</b></p> <p><b>ST.2.1.MS.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).</p>	<p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p>

<b>COMPLIANCE CATEGORY: STORAGE TANK MANAGEMENT State Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>ST.30.</b></p> <p><b>UST - STATE SPECIFIC</b></p> <p><b>ST.30.1.MS.</b> Certification from the Department is required to install, alter or remove an underground storage tank (MDEP, Underground Storage Tanks Regulations, UST-3, 280.20(g)) [Added May 2006; Revised March 2009; Revised XXX—I edited this file on March 17, 2009/co].</p>	<p>Verify that all owners and operators ensure that all tanks, piping and applicable ancillary components are installed by a contractor certified by MDEQ as a UST installer.</p> <p>Verify that all new or replacement dispensers installed on or after October 1, 2008, have secondary containment installed that will:</p> <ul style="list-style-type: none"> <li>- prevent the release of regulated substances to the environment for the operational life of the dispenser secondary containment</li> <li>- prevent the ingress of water or other external fluids into the interstitial space for the operational life of the dispenser secondary containment</li> <li>- allow for monitoring of the interstitial space to detect any leak from the dispensers or enclosed components of the piping system and ingress of external fluids</li> <li>- be checked for evidence of a leak and ingress of external fluids at least once every 30 days in accordance with §280.44(c)</li> <li>- be compatible with the substances stored and external soil/fluids for the operational life of the dispenser secondary containment.</li> </ul> <p>Verify that all new or replacement submersible pumps installed on or after October 1, 2008, have secondary containment installed that will:</p> <ul style="list-style-type: none"> <li>- prevent the release of regulated substances to the environment for the operational life of the submersible pump secondary containment</li> <li>- prevent the ingress of groundwater or other external fluids into the interstitial space for the operational life of the submersible pump secondary containment</li> <li>- allow for monitoring of the interstitial space to detect any leak from the submersible pump or enclosed components of the piping system and ingress of external fluids</li> <li>- be checked for evidence of a leak and ingress of external fluids at least once every 30 days in accordance with §280.44(c)</li> <li>- be compatible with the substances stored and external soil/fluids for the operational life of the submersible pump secondary containment.</li> </ul> <p>Verify that all pressurized piping is equipped with shear valves designed to shut-off the flow of product in the event a dispenser cabinet is impacted.</p> <p>Verify that all shear valves meet the following requirements:</p> <ul style="list-style-type: none"> <li>- are properly installed in accordance with one or more of the industry codes and recommended practices listed in §280.13 and in accordance with the manufacturer's instructions</li> </ul>

<b>COMPLIANCE CATEGORY:</b> <b>STORAGE TANK MANAGEMENT</b> <b>State Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
	<ul style="list-style-type: none"> <li>- effective October 1, 2009, be tested for functionality (the poppet valve or other shutoff mechanism is manually closed to confirm that it will shut off the flow of product) at least once every 12 months</li> <li>- a written record documenting the shear valve testing is maintained (in accordance with §280.35) to demonstrate compliance by providing the results of the last 2 tests.</li> </ul>

<b>COMPLIANCE CATEGORY: STORAGE TANK MANAGEMENT State Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>ST.35.</b></p> <p><b>NEW or UPGRADED USTs</b></p> <p><b>ST.35.1.MS.</b> New USTs must meet construction requirements (MDEP, Underground Storage Tank Regulations, UST-3, Section 280.20 (a)) [Added March 2009].</p>	<p>Verify that each tank is properly designed and constructed, and any portion underground that routinely contains product is protected from corrosion, in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory and the following requirements:</p> <ul style="list-style-type: none"> <li>- the tank is constructed of fiberglass-reinforced plastic</li> <li>- the tank is constructed of steel and cathodically protected in the following manner: <ul style="list-style-type: none"> <li>- the tank is coated with a suitable dielectric material</li> <li>- field-installed cathodic protection systems are designed by a corrosion expert</li> <li>- impressed current systems are designed to allow determination of current operating status as required in §280.32(c)</li> <li>- cathodic protection systems are operated and maintained in accordance with §280.32 or</li> </ul> </li> <li>- the tank is of composite construction (steel clad with fiberglass-reinforced-plastic or other polymeric materials)</li> <li>- the tank construction and corrosion protection are determined by the MDEQ to be designed to prevent the leak or threatened leak of any stored regulated substance.</li> </ul> <p>Verify that all new or replacement tanks installed on or after October 1, 2008, have secondary containment that meets the following requirements:</p> <ul style="list-style-type: none"> <li>- prevent the release of regulated substances to the environment for the operational life of the tank</li> <li>- prevent the ingress of water or other external fluids into the interstitial space for the operational life of the tank</li> <li>- allow for monitoring of the interstitial space to detect any leak from the primary tank and ingress of external fluids</li> <li>- be checked for evidence of a leak and ingress of external fluids at least once every 30 days</li> <li>- be compatible with the substances stored and external soil/fluids for the operational life of the tank.</li> </ul>

**COMPLIANCE CATEGORY:  
STORAGE TANK MANAGEMENT  
State Supplement**

<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>ST.35.2.MS.</b> New UST piping and ancillary equipment must meet construction requirements (MDEP, Underground Storage Tank Regulations, UST-3, Section 280.20 (b)) [Added March 2009].</p>	<p>Verify that each pipe and ancillary component that routinely contains regulated substances is properly designed, constructed, and protected from corrosion as specified below:</p> <ul style="list-style-type: none"> <li>- the piping is constructed of fiberglass-reinforced plastic or other polymeric materials</li> <li>- the piping is constructed of steel and cathodically protected in the following manner: <ul style="list-style-type: none"> <li>- the piping is coated with a suitable dielectric material</li> <li>- field-installed cathodic protection systems are designed by a corrosion expert</li> <li>- impressed current systems are designed to allow determination of current operating status as required in §280.32(c)</li> <li>- cathodic protection systems are operated and maintained in accordance with 280.32</li> </ul> </li> <li>- the piping is of composite construction (metal with fiberglass-reinforced plastic or other polymeric materials)</li> <li>- the piping construction and corrosion protection are determined by the MDEQ to be designed to prevent the leak or threatened leak of any stored regulated substance.</li> </ul> <p>Verify that all new or replacement piping installed on or after October 1, 2008, that is not part of a repair is secondarily contained in accordance with the following:</p> <ul style="list-style-type: none"> <li>- prevent the release of regulated substances to the environment for the operational life of the piping system</li> <li>- prevent the ingress of water or other external fluids into the interstitial space for the operational life of the piping system</li> <li>- allow for monitoring of the interstitial space to detect any leak from the primary pipe and ingress of external fluids</li> <li>- be checked for evidence of a leak and ingress of external fluids at least once every 30 days.</li> <li>- be compatible with the substances stored and external soil/fluids for the operational life of the piping system.</li> </ul>
<p><b>ST.35.3.MS.</b> New UST dispensers and submersible pumps must meet secondary containment requirements (MDEP, Underground Storage Tank Regulations, UST-3, Section 280.20 (h), (i), and (j)) [Added March 2009].</p>	<p>Verify that all new or replacement dispensers installed on or after October 1, 2008 have secondary containment installed that will:</p> <ul style="list-style-type: none"> <li>- prevent the release of regulated substances to the environment for the operational life of the dispenser secondary containment</li> <li>- prevent the ingress of water or other external fluids into the interstitial space for the operational life of the dispenser secondary containment</li> <li>- allow for monitoring of the interstitial space to detect any leak from the dispensers or enclosed components of the piping system and ingress of external fluids</li> <li>- be checked for evidence of a leak and ingress of external fluids at least once every 30 days</li> </ul>

<b>COMPLIANCE CATEGORY: STORAGE TANK MANAGEMENT State Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
	<ul style="list-style-type: none"> <li>- be compatible with the substances stored and external soil/fluids for the operational life of the dispenser secondary containment.</li> </ul> <p>Verify that all new or replacement submersible pumps installed on or after October 1, 2008 have secondary containment installed that will:</p> <ul style="list-style-type: none"> <li>- prevent the release of regulated substances to the environment for the operational life of the submersible pump secondary containment</li> <li>- prevent the ingress of groundwater or other external fluids into the interstitial space for the operational life of the submersible pump secondary containment</li> <li>- allow for monitoring of the interstitial space to detect any leak from the submersible pump or enclosed components of the piping system and ingress of external fluids</li> <li>- be checked for evidence of a leak and ingress of external fluids at least once every 30 days</li> <li>- be compatible with the substances stored and external soil/fluids for the operational life of the submersible pump secondary containment.</li> </ul> <p>Verify that all pressurized piping is equipped with shear valves designed to shut-off the flow of product in the event a dispenser cabinet is impacted.</p> <p>Verify that shear valves are properly installed in accordance with one or more of the industry codes and recommended practices and in accordance with the manufacturer's instructions.</p> <p>Verify that shear valves are tested for functionality (the poppet valve or other shutoff mechanism is manually closed to confirm that it will shut off the flow of product) at least once every 12 months.</p> <p>Verify that a written record documenting the shear valve testing is maintained to demonstrate compliance by providing the results of the last 2 tests.</p>



<b>COMPLIANCE CATEGORY:</b> <b>STORAGE TANK MANAGEMENT</b> <b>State Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>ST.45.</b></p> <p><b>UST FILLING</b></p> <p><b>ST.45.1.MS.</b> Spill and overfill prevention requirements must be met (MDEP, Underground Storage Tank Regulations, UST-3 280.30 (a), (b), and (c)) [Added March 2009].</p>	<p>Verify that owners and operators ensure that releases due to spilling or overfilling do not occur.</p> <p>Verify that the owner and operator ensure that the volume available in the tank is greater than the volume of product to be transferred to the tank before the transfer is made and that the transfer operation is monitored constantly to prevent overfilling and spilling.</p> <p>Verify that, prior to receiving a delivery, owners and operators ensure that the spill prevention equipment is free of any fluids or debris and the full volume of the spill containment device is available to contain any spills that may occur during the delivery.</p> <p>Verify that, after completion of the delivery, owners and operators ensure that the spill prevention equipment is emptied of any regulated substances that may have accumulated during the delivery operation.</p> <p>Verify that the owner and operator reports, investigates, and cleans up any spills and overfills.</p> <p>Verify that the integrity of all spill prevention equipment that is not continuously monitored is tested in accordance with the following requirements:</p> <ul style="list-style-type: none"> <li>- spill prevention equipment installed on or after October 1, 2008, is tested after installation and before the UST system receives any delivery of regulated substances and at least once every 12 months thereafter</li> <li>- spill prevention equipment installed before October 1, 2008, is tested by October 1, 2009, and at least once every 12 months thereafter</li> <li>- spill prevention equipment is tested whenever it is suspected, by visual evidence or other means, that the integrity of the spill prevention equipment may be in question.</li> </ul> <p>Verify that spill prevention equipment integrity testing is conducted in accordance with the manufacturer's specifications and any applicable listed code of practice.</p> <p>Verify that a written record documenting the integrity testing of spill containment equipment is maintained to demonstrate compliance by maintaining the results of the last 2 required tests.</p>

<b>COMPLIANCE CATEGORY: STORAGE TANK MANAGEMENT State Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<b>ST.45.2.MS.</b> Overfill prevention equipment requirements must be met (MDEP,      Underground Storage Tank Regulations, UST-3 280.30 (d)) [Added March 2009].	<p>Verify that overfill prevention equipment (including any tight-fill adapters that may be in use) is inspected and proper operation ensured in accordance with the following requirements.</p> <p>Verify that overfill prevention equipment installed on or after October 1, 2008, is inspected for proper operation after installation and before the UST system receives any delivery of regulated substances and at least once every 12 months thereafter.</p> <p>Verify that overfill prevention equipment installed before October 1, 2008, is inspected for proper operation by October 1, 2009, and at least once every 12 months thereafter.</p> <p>Verify that overfill prevention equipment is inspected whenever it is suspected, by visual evidence or other means, that the proper operation of the overfill prevention equipment may be in question.</p> <p>Verify that, at a minimum, the inspection ensures that the overfill prevention equipment:</p> <ul style="list-style-type: none"> <li>- is properly installed</li> <li>- is properly functioning in accordance with the manufacturer's specifications and any applicable code of practice.</li> </ul> <p>(NOTE: In the absence of manufacturer's specifications or an applicable industry code or recommended practice, the inspection may be accomplished by removal of the equipment from the tank, visual examination and confirmation that the overfill device is installed at the correct height within the tank.)</p> <p>Verify that a written record documenting the inspection of the overfill prevention equipment is maintained (in accordance with §280.35) to demonstrate compliance by providing the results of the last 2 required inspections.</p>

<b>COMPLIANCE CATEGORY: STORAGE TANK MANAGEMENT State Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>ST.55.</b></p> <p><b>UST REPAIRS</b></p> <p><b>ST.55.1.MS.</b> UST repairs must meet specific requirements (MDEP, Underground Storage Tank Regulations, UST-3 280.34) [Added March 2009].</p>	<p>Verify that owners and operators of UST systems ensure that repairs will prevent leaks due to structural failure or corrosion as long as the UST system is used to store regulated substances.</p> <p>Verify that repairs to UST systems are properly conducted in accordance with the manufacturer's specifications and any applicable listed code of practice.</p> <p>Verify that repairs to fiberglass-reinforced plastic tanks are conducted in accordance with the manufacturer's specifications and any applicable code of practice.</p> <p>Verify that metal pipe sections and fittings that have leaked product as a result of corrosion or other damage are replaced.</p> <p>(NOTE: Replaced as it applies to metal pipe sections means that only the section of pipe from joint-to-joint must be replaced when repairing such a pipe system. It is not intended to imply that the entire piping system must be replaced with a secondarily contained pipe system.)</p> <p>Verify that repairs to fiberglass-reinforced plastic piping are conducted in accordance with the manufacturer's specifications and any applicable code of practice.</p> <p>Verify that repaired tanks and piping are tightness tested after such repairs are complete and before the UST system is brought back into service.</p> <p>Verify that repaired spill containment equipment and secondary containment that can not be tightness tested is tested in accordance with 280.30(c) and 280.31(d) after such repairs are complete and before the UST system is brought back into service.</p> <p>Verify that repaired dispensers, submersible pumps and other ancillary equipment that can not be tightness tested is visually inspected for any leaks to ensure integrity after such repairs are complete and before the UST system is brought back into service.</p> <p>Verify that, if an existing underground storage tank, pipe, dispenser, or submersible pump is replaced, the requirements in 280.20 apply only to the specific underground storage tank, pipe, dispenser, or submersible pump being replaced, not to other underground storage tanks, piping, dispensers or submersible pumps located at the underground storage tank facility.</p> <p>(NOTE: The MDEQ may waive the requirement that secondary containment be</p>

<b>COMPLIANCE CATEGORY:</b> <b>STORAGE TANK MANAGEMENT</b> <b>State Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
	<p>installed when a dispensers or submersible pump is replaced because of an accident or for other circumstances the MDEQ deems appropriate.)</p> <p>Verify that, within 6 months following the repair of any cathodically protected UST system, the cathodic protection system is tested in accordance with 280.32 (b) and (c) to ensure that it is operating properly.</p> <p>Verify that UST system owners and operators maintain records of each repair and replacement for the remaining operating life of the UST system that demonstrate compliance.</p>

<b>COMPLIANCE CATEGORY:</b> <b>STORAGE TANK MANAGEMENT</b> <b>State Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>ST.75.</b></p> <p><b>UST CONNECTED to EMERGENCY GENERATORS</b></p> <p><b>ST.75.1.MS.</b> New or replacement tanks and piping of an emergency generator UST installed on or after October 1, 2008 must meet specific requirements (MDEP, Underground Storage Tank Regulations, UST-3 280.10 (d) (2)) [Added March 2009; Revised March 2010].</p>	<p>Verify that new or replaced tanks and piping of an emergency generator UST system installed on or after October 1, 2008, have secondary containment (280.20(a)(4) and 280.20(b)(4)) and are monitored for leaks (280.43(g) and 280.44(c)) unless the piping meets all of the requirements below.</p> <p>Verify that the suction piping is designed and constructed to meet the following requirements:</p> <ul style="list-style-type: none"> <li>- the below-grade piping operates at less than atmospheric pressure</li> <li>- the below-grade piping is sloped so that the contents of the pipe will drain back into the storage tank if the suction is released</li> <li>- only one check valve is included in each suction line</li> <li>- the check valve is located directly below and as close as practical to the suction pump</li> <li>- a method is provided that allows compliance to be readily determined.</li> </ul>

<b>COMPLIANCE CATEGORY:</b> <b>STORAGE TANK MANAGEMENT</b> <b>State Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>ST.85.</b></p> <p><b>DEFERRED USTS</b></p> <p><b>ST.85.1.MS.</b> Deferred UST systems must meet specific requirements (MDEP, Underground Storage Tank Regulations, UST-3, and Section 280.11) [Added March 2009].</p>	<p>Verify that deferred UST systems (whether of single- or double-wall construction) meet the following requirements:</p> <ul style="list-style-type: none"> <li>- will prevent leaks due to corrosion or structural failure for the operational life of the UST system</li> <li>- is cathodically protected against corrosion, constructed of noncorrodible material, steel clad with a noncorrodible material, or designed in a manner to prevent the leak or threatened leak of any stored substance</li> <li>- is constructed of materials that are compatible with the stored substance.</li> </ul> <p>(NOTE: The following are deferred USTs:</p> <ul style="list-style-type: none"> <li>- wastewater treatment tank systems</li> <li>- any UST systems containing radioactive material that are regulated under the Atomic Energy Act of 1954 (42 U.S.C. 2011 and following)</li> <li>- any UST system that is part of an emergency generator system at nuclear power generation facilities regulated by the Nuclear Regulatory Commission under 10 CFR part 50, appendix A</li> <li>- airport hydrant fuel distribution systems</li> <li>- UST systems with field-constructed tanks.)</li> </ul>

<b>COMPLIANCE CATEGORY: STORAGE TANK MANAGEMENT State Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>ST.90.</b></p> <p><b>UST DOCUMENTATION</b></p> <p><b>ST.90.1.MS.</b> UST notification requirements must be met (MDEP, Underground Storage Tank Regulations, UST-3, Section 280.22) [Added March 2009].</p>	<p>Verify that any owner who intends to install a new or replace an existing underground storage tank, pipe, dispenser, or submersible pump on or after October 1, 2008, within 30 days of such planned installation, submits a "State of Mississippi Notice of Upcoming Underground Storage Tank System Installation" form.</p> <p>(NOTE: Note: If an unplanned replacement of an existing tank, pipe, dispenser, or submersible pump is necessary due to failure, an accident or for other circumstances MDEQ deems appropriate, submittal of a "State of Mississippi Notice of Upcoming Underground Storage Tank System Installation" form is not required.)</p> <p>Verify that any owner who brings into use, installs, replaces or changes the operational status of an underground storage tank, pipe, dispenser or submersible pump, after May 8, 1986, within 30 days of bringing such tank, pipe, dispenser or submersible pump into use or changing the operational status of, submits a "State of Mississippi Notification for Underground Storage Tank System" form.</p> <p>(NOTE: Owners and operators of UST systems that were in the ground on or after May 8, 1986, unless taken out of operation on or before January 1, 1974, were required to notify the designated state or local agency in accordance with the Hazardous and Solid Waste Amendments of 1984, Pub. L. 98--616, on a form published by EPA on November 8, 1985, (50 FR 46602) unless notice was given pursuant to section 103(c) of CERCLA.)</p> <p>Verify that any person, who becomes the owner of an existing underground storage tank system, within 30 days of becoming the owner, submits a "State of Mississippi Underground Storage Tank System Change of Ownership" form or a "State of Mississippi Notification for Underground Storage Tank System" form.</p> <p>Verify that all owners and operators of UST systems installed on or after December 22, 1988, ensure that the installer certifies in the notification form that the methods used to install the tanks and piping complies with the requirements in 280.20(f).</p>

## SECTION 11

### TOXIC SUBSTANCES MANAGEMENT

#### Mississippi Supplement, March 2010

This section covers the state requirements for Toxic Substances Management and is intended to supplement the TEAM Guide. Refer to the TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

#### Definitions

- *Abatement* - with regard to asbestos, the removal, encapsulation, enclosure, or repair of an operations and maintenance program for asbestos-containing materials (ACMs) (Mississippi Department of Environmental Quality (MDEQ), Office of Pollution Control, Air Division, *Regulations for the Accreditation and Certification of Asbestos Abatement Personnel*, APC-S-10, Section II) [Citation Revised May 2006].
- *Abatement* - with regard to lead based paint, any measure or set of measures designed to permanently eliminate lead-based paint hazards. Abatement includes, but is not limited to (MDEQ, Office of Pollution Control, Air Division, *Regulations for Lead-Based Paint Activities*, APC-S-9, Definitions) [Citation Revised May 2006]:
  1. The removal of lead-based paint and lead-contaminated dust, the permanent enclosure or encapsulation of lead-based paint, the replacement of lead-painted surfaces or fixtures, and the removal or covering of lead-contaminated soil
  2. All preparation, cleanup, disposal, and post-abatement clearance testing activities associated with such measures
  3. Specifically, abatement includes, but is not limited to:
    - a. Projects for which there is a written contract or other documentation, which provides that a person will be conducting activities in or to a residential dwelling or child-occupied facility that will result in the permanent elimination of lead-based paint hazards; or are designed to permanently eliminate lead-based paint hazards as defined in this section
    - b. Projects resulting in the permanent elimination of lead-based paint hazards, conducted by persons certified in accordance with Chapter II, unless such projects are covered by subsection d. of this definition; or
    - c. Projects resulting in the permanent elimination of lead-based paint hazards, conducted by persons who, through their company name or promotional literature, represent, advertise, or hold themselves out to be in the business of performing lead-based paint activities as identified and defined by this section, unless such projects are covered by subsection d. of this definition
    - d. Projects resulting in the permanent elimination of lead-based paint hazards that are conducted in response to State or local abatement orders.

Abatement does not include renovation, remodeling, painting or repainting, landscaping or other activities, when such activities are not designed to permanently eliminate lead-based paint hazards, but, instead, are designed to repair, restore, or remodel a given structure or dwelling, even though these activities may incidentally result in a reduction or elimination of lead-based paint hazards. Furthermore, abatement does not include interim controls, operations and maintenance activities, or other measures and activities designed to temporarily, but not permanently, reduce lead-based paint hazards.
- *Asbestos* - the asbestiform varieties of: chrysotile (serpentine); crocidolite (riebeckite); amosite (cummingtonite-grunerite); anthophyllite; tremolite; and actinolite (MDEQ, APC-S-10, Section II) [Citation Revised May 2006].
- *Asbestos-Containing Materials (ACMs)* - any material or product that contains more than 1 percent asbestos (MDEQ, APC-S-10, Section II) [Citation Revised May 2006].



- *Asbestos Project* - a project for the abatement of ACM in school buildings, public buildings or commercial buildings including the abatement of shingles, tiles, or felt containing ACM in the roof or exterior siding of such building except for exclusions adopted by the Commission in accordance with Section 37-138-9(a) and except for abatement of asbestos-containing resilient floor tile, sheet vinyl flooring and associated adhesives provided there is a two-working-day advance notification to the commission of the abatement of asbestos-containing floor tile, sheet vinyl flooring and associated adhesives, unless sanding, grinding, burning or sawing occurs or such abatement is otherwise considered a "response action" or would cause the material to become "friable" as both those terms are defined under 40 CFR Section 763.83. (MDEQ, APC-S-10, Section II) [Revised May 2006].
- *Building* - any structure having two or more walls and a roof or ceiling; and any other structure that is totally enclosed (MDEQ, APC-S-10, Section II) [Citation Revised May 2006].
- *Certificate* - a document issued by the Commission or its designee authorizing an individual to perform certain specific activities related to the identification, evaluation, or abatement of ACM in school buildings, public buildings, and commercial buildings (MDEQ, APC-S-10, Section II) [Revised May 2004; Citation Revised May 2006].
- *Commercial Building* - any privately owned building, including any industrial building, in which the public is invited or allowed access and any other privately owned building so located that the conduct of any asbestos abatement activities therein could reasonably expose any person or persons to ACM hazards, except that a commercial building, shall not include a residence (MDEQ, APC-S-10, Section II) [Citation Revised May 2006].
- *Inspector* - with regard to asbestos, a person employed to inspect or reinspect for the presence of ACM, collect samples of ACM confirmation, and provide written assessment of ACM (MDEQ, APC-S-10, Section II) [Citation Revised May 2006].
- *Inspector* - with regard to lead based paint, an individual employed to inspect or reinspect for the presence of lead-based paint, to collect samples for the presence of lead in dust and soil for the purposes of abatement clearance testing and to prepare inspection reports (MDEQ, APC-S-9, Definitions) [Citation Revised May 2006].
- *Lead-Based Paint* - paint or other surface coatings that contain lead equal to or in excess of 1.0 milligrams per square centimeter or more than 0.5 percent by weight (MDEQ, APC-S-9, Definitions) [Citation Revised May 2006].
- *Lead-Based Paint Activities* - in the case of target housing and child-occupied facilities, inspection, risk assessment, and abatement, as defined in this section (MDEQ, APC-S-9, Definitions) [Citation Revised May 2006].
- *Management Plan* - a plan for abatement of ACM (MDEQ, APC-S-10, Section II) [Citation Revised May 2006].
- *Management Planner* - a person employed to develop a management plan (MDEQ, APC-S-10, Section II) [Citation Revised May 2006].
- *Model Plan* - the Model Accreditation Plan for States promulgated under Title II of Toxic Substances Control Act (TSCA) (Section I of Appendix C to Title 40, Part 763, Subpart E of the Code of Federal Regulations) which is incorporated herein and adopted by reference (MDEQ, APC-S-10, Section II) [Added May 2006].

- *Operations and Maintenance Program* - a program of work practices to maintain ACM in good condition, ensure cleanup of asbestos fibers previously released, and prevent further release by minimizing and controlling ACM disturbance or damage (MDEQ, APC-S-10, Section II) [Citation Revised May 2006].
- *Project Designer* - with regard to asbestos, a person who specifies engineering methods and work practices to be used during asbestos projects (MDEQ, APC-S-10, Section II) [Citation Revised May 2006].
- *Project Designer* - with regard to lead based paint, an individual employed to prepare abatement project designs, occupant protection plans and abatement project reports (MDEQ, Regulations for Lead-Based Paint Activities, APC-S-9, Definitions) [Citation Revised May 2006].
- *Public Building* - any building owned by the state, counties, municipalities, institutions of higher learning, community colleges, or any political subdivision, and excludes any building owned by the United States government (MDEQ, APC-S-10, Section II) [Citation Revised May 2006].
- *Removal* - the taking out or the stripping of ACM from a school building, public building, or commercial building (MDEQ, APC-S-10, Section II) [Citation Revised May 2006].
- *Repair* - returning damaged ACM to an undamaged condition or to an intact state so as to prevent fiber release (MDEQ, APC-S-10, Section II) [Citation Revised May 2006].
- *Residence* - a building, other than a school building, public building, or commercial building, or portion of a commercial building, which is actually owned or leased, and simultaneously occupied by one or more individuals as a fixed or permanent place of habitation, including, but not limited to, and primarily consisting of, single family unit houses and apartments buildings having 4 or fewer dwellings (MDEQ, APC-S-10, Section II) [Revised May 2006].
- *Rubbish* - nonputrescible solid wastes (excluding ashes) consisting of both combustible and noncombustible wastes. Combustible rubbish includes paper, rags, cartons, wood, furniture, rubber, plastics, yard trimmings, leaves, and similar material. Noncombustible rubbish includes glass, crockery, metal cans, metal furniture, and like material which will not burn at ordinary incinerator temperatures (not less than 1600 °F) (MDEQ, Nonhazardous Solid Waste Regulations and Criteria, SW-2, Section I.C) [Citation Revised May 2006; Citation Revised March 2007].
- *Rubbish Site* - a site which receives rubbish for the purpose of disposal (MDEQ, *Nonhazardous Solid Waste Regulations and Criteria*, SW-2, Section I.C) [Citation Revised March 2007].
- *School Building* - includes the following (MDEQ, APC-S-10, Section II) [Citation Revised May 2006]:
  1. any structure suitable for use as a classroom, including a school facility such as a laboratory, library, school eating facility, or facility used for the preparation of food.
  2. any gymnasium or other facility that is specially designed for athletic or recreational activities or for an academic course in physical education
  3. any other facility used for the instruction or housing of students or for the administration of educational or research programs
  4. any maintenance, storage or utility facility including any hallway, essential to the operation of any facility described in this definition of school building under paragraphs 1, 2, or 3
  5. any portico or covered exterior hallway or walkway
  6. any exterior portion of a mechanical system used to condition interior space.
- *Small-Scale, Short Duration Abatement Activities* - the meaning as set forth in the Model Plan which is incorporated herein and adopted by reference (MDEQ, APC-S-10, Section II) [Added May 2006].

- *Supervisor* - a person designated by a contractor to be responsible for direction of day-to-day activities of an asbestos project (MDEQ, APC-S-10, Section II) [Citation Revised May 2006].
- *Worker* - a person who works on an asbestos project other than a project designer, contractor, supervisor, inspector, or management planner (MDEQ, APC-S-10, Section II) [Citation Revised May 2006].

**TOXIC SUBSTANCES MANAGEMENT  
GUIDANCE FOR MISSISSIPPI CHECKLIST USERS**

**REFER TO CHECKLIST ITEMS:**

**PCB Management**

Polychlorinated biphenyls (PCBs) are restricted from solid waste disposal facilities and are subject to Federal disposal requirements. This protocol has no specific, applicable state regulations for the management of PCBs. Refer to the TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

Missing Checklist Items T1.2.1.MS.

**Asbestos Management**

Missing Checklist Items T2.2.1.MS.

Asbestos Personnel Training T2.10.1.MS. and T2.10.2.MS.

Asbestos Disposal T2.15.1.MS.

**Radon Management**

Refer to the U.S. TEAM Guide and the DOD Component Supplements for DOD and service-specific requirements.

Missing Checklist Items T3.2.1.MS.

**Lead Based Paint**

All Federal Facilities T4.1.1.MS.

Missing Checklist Items T4.2.1.MS.

Lead Based Paint Management T4.10.1.MS.

<b>COMPLIANCE CATEGORY:</b> <b>TOXIC SUBSTANCES MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>PCB MANAGEMENT</b>  <b>T1.2.</b> <b>Missing Checklist Items</b>  <b>T1.2.1.MS.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).	<p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p>

<b>COMPLIANCE CATEGORY:</b> <b>TOXIC SUBSTANCES MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>ASBESTOS MANAGEMENT</b>  <b>T2.2.</b> <b>Missing Checklist Items</b>  <b>T2.2.1.MS.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).	<p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p>

<b>COMPLIANCE CATEGORY:</b> <b>TOXIC SUBSTANCES MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>T2.10.</b></p> <p><b>ASBESTOS PERSONNEL TRAINING</b></p> <p><b>T2.10.1.MS.</b> Persons that engage in physical activities related to asbestos projects must have a valid certificate (MDEQ, APC-S-10, Sections III, IV (3) and X) [Revised May 2004; Revised May 2006; Revised March 2007].</p> <p><b>T2.10.2.MS.</b> Asbestos projects must have a certified supervisor (MDEQ, APC-S-10, Section XI) [Added May 2006].</p>	<p>Verify that any person that engages in any asbestos project in a school building, public building, or commercial building as an inspector, management planner, project designer, contractor, supervisor, or worker has a valid certification issued by the Commission.</p> <p>Verify that contractors do not employ any workers, or any other individual of different certification category on an asbestos project who do not possess a current and appropriate certificate issued by the Commission.</p> <p>Verify that any person that engages in the physical activities related to abatement of ACMs in a school building, public building, or commercial building has a valid initial or renewed worker certificate.</p> <p>Verify that applications for the renewal of initial or renewal certificates are submitted 30 days prior to the expiration date of the certificate.</p> <p>(NOTE: Small-scale, short duration abatement activities (see definitions) may be conducted in school buildings, public buildings and commercial buildings without utilization of certified inspectors, management planners, project designers, supervisors, air monitors, contractors and workers.</p> <p>Verify that at least one certified supervisor is at the asbestos project worksite at all times while abatement activities are in progress.</p> <p>Verify that certified workers have access to a certified supervisor throughout the duration of the asbestos project.</p> <p>Verify that the contractor(s) and supervisor(s) for an asbestos project maintains all certificates for all contractors, supervisors and workers who are employed in connection with the asbestos project at the asbestos project site.</p>

<b>COMPLIANCE CATEGORY:</b> <b>TOXIC SUBSTANCES MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>T2.15.</b></p> <p><b>ASBESTOS DISPOSAL</b></p> <p><b>T2.15.1.MS.</b> Asbestos disposal at solid waste disposal facilities must meet specific requirements (MDEQ: Nonhazardous Solid Waste Management Regulations and Criteria, SW-2, Section VIBE (1) (a) (4) and Section VIED (7)) [Citation Revised June 1998].</p>	<p>Verify that asbestos and ACM are not disposed of at any rubbish site.</p> <p>Verify that ACM disposed in a landfill is properly bagged or contained in such a manner as to prevent the wastes from becoming airborne.</p>



<b>COMPLIANCE CATEGORY:</b> <b>TOXIC SUBSTANCES MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>RADON GAS</b>  <b>T3.2.</b> <b>Missing Checklist Items</b>  <b>T3.2.1.MS.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).	<p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p>

<b>COMPLIANCE CATEGORY:</b> <b>TOXIC SUBSTANCES MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>LEAD BASED PAINT</b>  <b>T4.1.</b> <b>All Federal Facilities</b>  <b>T4.1.1.MS.</b> Persons engaged in lead-based paint activities must be certified by the Commission (MDEQ, APC-S-9, Chapter II, Section A.4) [Added June 1998; Citation Revised May 2006].	Verify that any person who conducts any lead-based paint activities (inspection, lead-hazard screen, risk assessment or abatement) has been certified by the Commission for that activity.

<b>COMPLIANCE CATEGORY:</b> <b>TOXIC SUBSTANCES MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>LEAD-BASED PAINT</b>  <b>T4.2.</b> <b>Missing Checklist Items</b>  <b>T4.2.1.MS.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).	<p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p>

<b>COMPLIANCE CATEGORY: TOXIC SUBSTANCES MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>T4.10.</b></p> <p><b>LEAD-BASED PAINT MANAGEMENT</b></p> <p><b>T4.10.1.MS.</b> The Department must be notified prior to LBP abatement (MDEQ, APC-S-9, Chapter III, Section I) [Added May 2006; Citation Revised March 2007].</p>	<p>(NOTE: This checklist item is similar to 40 CFR 745.227. EPA must be notified prior to LBP abatement although the timing of notification is changed.)</p> <p>Verify that the Department is notified in writing of any lead-based paint abatement activity in target housing or child-occupied facility no less than 6 working days prior to commencement of the activity.</p> <p>Verify that written notifications of lead abatement activity are hand delivered, express mailed, or postmarked at least 6 working days (not calendar days) before the start of lead-based paint abatement.</p> <p>Verify that an original signature of the certified firm's owner or an authorized agent of the firm is on each notification form.</p> <p>Verify that when lead abatement activity begins later than the date contained in the notice, the certified firm's owner or an authorized agent of the firm does the following:</p> <ul style="list-style-type: none"> <li>- notifies the Department of the changed start date by telephone as soon as possible but prior to the original start date</li> <li>- provides the Department with a written notice of the new start date as soon as possible, but no later than the original start date.</li> </ul> <p>Verify that when lead abatement will begin on a date earlier than the date contained in the notice, the certified firm's owner or an authorized agent of the firm provides the Department with a written notice of the new start date at least 10 working days before the start of work.</p> <p>Verify that the lead abatement activity begins or is completed on the date contained in the written notice.</p> <p>Verify that amendments to the notice are submitted for any stop dates which change by more than one work day for each week (seven calendar day period) for which the project has been scheduled and notification submitted.</p> <p>Verify that the certified firm provides schedule changes to the Department no less than 24 hours prior to the change or completion of the project.</p> <p>(NOTE: Emergency notification can be confirmed with the Department telephonically and followed up in writing.)</p>

<b>COMPLIANCE CATEGORY:</b> <b>TOXIC SUBSTANCES MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>

## SECTION 12

### WASTEWATER MANAGEMENT

#### Mississippi Supplement, March 2010

This section covers the state requirements for Wastewater Management and is intended to supplement the TEAM Guide. Refer to the TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

#### Definitions

- *Certificate* - the certification of competency issued by the Department stating that the operator has met the requirements for the specified operator classification (MDEQ, *Regulations for the Certification of Municipal and Domestic Wastewater Facility Operators*, Section 2) [Added May 2005].
- *Coastal Wetlands* - all publicly owned lands subject to the ebb and flow of the tide; which are below the watermark of ordinary high tide; all publicly owned accretions above the watermark of ordinary high tide and all publicly owned submerged water-bottoms below the watermark of ordinary high tide (Mississippi Department of Wildlife Conservation (MDWC), *Mississippi Coastal Program*, Chapter 8, Section 1, Part III).
- *Commission* - the Mississippi Commission on Environmental Quality (MDEQ, *Wastewater Permit Regulations for National Pollutant Discharge Elimination System (NPDES) and Underground Injection Control (UIC)*, and *State Operating Permits*, Chapter One, Section 1.A).
- *Department* - the Mississippi State Department of Health (MS ADC Health WW-1, Chapter 01, Section 102) [Added May 2002; Citation Revised March 2009; Citation Revised March 2010].
- *Dredging* - the removal or displacement by any means of soil, sand, gravel, shells, or other material from coastal wetlands (MDWC, *Mississippi Coastal Program*, Chapter 8, Section 1, Part III).
- *Design Based System* - an individual onsite wastewater disposal system designed and installed in accordance with design standards outlined in this regulation (MS ADC Health WW-1, Chapter 01, Section 102) [Added March 2009; Citation Revised March 2010].
- *Effluent Standards and Limitations* - all state or Federal effluent standards and limitations on quantities, rates, and concentrations of chemical, physical, biological, and other constituents to which waste or wastewater discharge may be subject under Federal Act or state law, including but not limited to, effluent limitations, standards of performance, toxic effluent standards and prohibitions, pretreatment standards, and schedule of compliance (MDEQ, Surface Water Division, *Wastewater Permit Regulations for National Pollutant Discharge Elimination System (NPDES) and Underground Injection Control (UIC)*, and *State Operating Permits (WPC-1)*, Section 1.A) [Citation Revised May 2006].
- *Federal Act* - the Federal Clean Water Act (CWA) or the Safe Drinking Water Act (SDWA) (MDEQ, Surface Water Division, WPC-1, Section 1.A) [Citation Revised May 2006].
- *Filling* - the deposition into any coastal wetlands of soil, sand, gravel, shells, or other material; or the artificial alteration of water levels or water currents by physical structures, drainage ditches or otherwise (MDWC, *Mississippi Coastal Program*, Chapter 8, Section 1, Part III).

- *General NPDES Permit* - an NPDES permit written to cover a specific category of similar discharges within a specific geographic or political boundary (MDEQ, *Wastewater Permit Regulations for National Pollutant Discharge Elimination System (NPDES) and Underground Injection Control (UIC)*, and *State Operating Permits*, Chapter One, Section 1.A).
- *Generator* - any person whose act or process produces sewage or other material suitable for disposal in an Individual On-Site Wastewater Disposal System (MS ADC Health WW-1, Chapter 01, Section 102) [Added March 2010].
- *Individual On-site Wastewater Disposal System (Existing)* - a sewage treatment and effluent disposal system that does not discharge into waters of the state, that serves only 1 legal tract, that accepts only residential waste and similar waste streams maintained on the property of the generator, and that is designed and installed in accordance with law and regulations of the Board and has been occupied for a specific period of time deemed necessary for determining if properly functioning by the Department (MS ADC Health WW-1, Chapter 01, Section 102) [Added March 2010].
- *Individual On-site Wastewater Disposal System (New)* - a sewage treatment and effluent disposal system that does not discharge into waters of the state, that serves only 1 legal tract, that accepts only residential waste and similar waste streams maintained on the property of the generator, and that is designed and installed in accordance with this law and regulations of the Board (MS ADC Health WW-1, Chapter 01, Section 102) [Added March 2010].
- *Individual On-site Wastewater Disposal System (Repair)* - a sewage treatment and effluent disposal system that can be made approvable or compliant with Section **41-67-9(2)** by replacing some portion of the sewage treatment and effluent disposal system (MS ADC Health WW-1, Chapter 01, Section 102) [Added March 2010].
- *Individual On-site Wastewater Disposal System (Temporary)* - an option for wastewater disposal as outlined in Section (MS ADC Health WW-1, Chapter 01, Section 102) [Added March 2010].
- *Malfunctioning* - any On-Site Wastewater Disposal System or component part that fails to operate as intended or not in compliance with regulation or state laws (MS ADC Health WW-1, Chapter 01, Section 102) [Added March 2010].
- *Notice of Intent* - required information from an Applicant, which is used by the Department to design an Individual On-site Wastewater Disposal System (MS ADC Health WW-1, Chapter 01, Section 102) [Added March 2010].
- *NPDES* - National Pollutant Discharge Elimination System (MDEQ, *Surface Water Division*, WPC-1, Section 1.A) [Citation Revised May 2006].
- *NPDES Permit* - National Pollution Discharge Elimination System Permit, an individual or group permit issued by the Permit Board pursuant to regulations adopted by the Commissioner and/or the Permit Board (MDEQ, *Surface Water Division*, WPC-1 Section 1.A) [Citation Revised May 2006].
- *Operator* - the person who directly supervises and is personally responsible for the daily operation and maintenance of a wastewater facility, community water system or commercial nonhazardous solid waste management landfill (MDEQ, *Regulations for the Certification of Municipal and Domestic Wastewater Facility Operators*, Section 2) [Added May 2005].
- *Performance-based System* - an Individual On-site Wastewater Disposal System designed to meet standards established to designate a level of treatment of wastewater that an IOWDS must meet, including, but not limited

to Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), nutrient reduction and fecal coliform (MS ADC Health WW-1, Chapter 01, Section 102) [Added March 2010].

- *Permanent Water Service Connection* - a water service connection made to an Applicant's property once the Department has approved the Individual On-Site Wastewater Disposal System (MS ADC Health WW-1, Chapter 01, Section 102) [Added March 2010].
- *Permit* - a written permit issued by the Agency permitting the campground to operate under this regulation (MS ADC Health WW-2, Section 4.3) [Added March 2009].
- *Permit Board* - the Permit Board of the Department of Environmental Quality (MDEQ, *Surface Water Division*, WPC-1, Section 1.A) [Citation Revised May 2006].
- *Permit/Recommendation* - documentation given to a Applicant listing all viable options for Individual On-site Wastewater Disposal for the Applicant's lot, tract or parcel MS ADC Health WW-1, Chapter 01, Section 102) [Added March 2010].
- *Person* - any individual, trust, firm, joint-stock company, public or private corporation (including a government corporation), partnership, association, state, or any agency or institution thereof, municipality, commission, political subdivision of a state or any interstate body, and includes any officer or governing or managing body of any municipality, political subdivision, or the United States or any officer or employee thereof (MS ADC Health WW-1, Chapter 01, Section 102) [Added May 2005; Citation Revised March 2009; Revised March 2010].
- *Person* - shall mean any individual, firm, partnership, corporation, company, association, or governmental unit (MS ADC Health WW-2, Section 4.3) [Added March 2009].
- *Pollution* - the contamination or other alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, or odor of the waters, or the discharge of any liquid, gaseous, solid, radioactive or other substance or heat into any waters of the State (MDEQ, *Regulations for the Certification of Municipal and Domestic Wastewater Facility Operators*, Section 2) [Added May 2005].
- *POTW* - publicly owned treatment works (MDEQ, *Surface Water Division*, WPC-1 Section 1.A) [Citation Revised May 2006].
- *Pretreatment System* - any process used to reduce the amount of pollutants in wastewater before discharging the wastewater into a POTW or privately owned treatment works treating nondomestic water (MDEQ, *Surface Water Division*, WPC-1, Section 1.A) [Citation Revised May 2006].
- *Property of the Generator* – land owned by or under easement in perpetuity to the generator, duly recorded in the courthouse (MS ADC Health WW-1, Chapter 01, Section 102) [Added May 2002; Citation Revised March 2009; Citation Revised March 2010].
- *Public Water Supply* - a system that provides water via piping or other constructed conveyances for human consumption to at least 15 service connections or serves an average of at least 25 people for at least 60 days each year. There are 3 types: Community (towns), Non-transient non-community (schools or factories), or Transient non-community systems (rest stops or parks) MS ADC Health WW-1, Chapter 01, Section 102) [Added March 2010].
- *Publicly Owned Treatment Works (POTW)* - a waste treatment facility owned and/or operated by a public body or a privately owned treatment works which accepts discharges which would otherwise be subject to Federal



Pretreatment Requirements (MDEQ, *Surface Water Division*, WPC-1, Section 1.A) [Revised June 1998; Citation Revised May 2006].

- *Recreational Vehicle* - shall mean a vehicular-type unit designed as living quarters for recreational, camping, or travel use, which either has its own motive power or is mounted on or towed by another vehicle. The basic entities include, but are not limited to a travel trailer, camping trailer, truck camper, van, and motor home (MS ADC Health WW-2, Section 4.3) [Added March 2009].
- *Recreational Vehicle Campground* - shall mean any parcel or tract of land under the control of any person, organization, or governmental entity wherein sites are offered for the use of the public or members of an organization for the establishment of living sites for two or more recreational vehicles (MS ADC Health WW-2, Section 4.3) [Added March 2009].
- *Recreational Vehicle Lodging Park* - shall mean a recreational vehicle campground with approved water and sewer connections provided to each living site for the accommodation of "self-contained unit" recreational vehicle parking (MS ADC Health WW-2, Section 4.3) [Added March 2009].
- *Regulated Activity* - means any of the following activities (MDWC, *Mississippi Coastal Program*, Chapter 8, Section 1, Part III):
  1. dredging, excavating or removing of soil, mud, sand, gravel, flora, fauna, or aggregate of any kind from any coastal wetland
  2. dumping, filing, or depositing of any soil, stones, sand, gravel, mud, aggregate of any kind, or garbage, either directly or indirectly, on or in any coastal wetlands
  3. killing or materially damaging any flora or fauna on or in any coastal wetland
  4. the erection on coastal wetlands of structures which materially affect the ebb and flow of the tide
  5. the erection of any structure or structures on suitable sites for water dependent industry.
- *Repair* - the construction, installation and correcting of a malfunctioning Individual On-Site Wastewater Disposal System that cannot be performed as routine maintenance and must be provided by a Certified Installer (MS ADC Health WW-1, Chapter 01, Section 102) [Added March 2009; Revised March 2010].
- *Sensitive Waters* – public or private waters used for recreation (swimming, skiing, fishing), shellfish harvesting, potable water intake or other situations where people are likely to come into contact with the water (MS ADC Health WW-1, Chapter 01, Section 102) [Added May 2002; Citation Revised March 2009; Citation Revised March 2010].
- *Sewage* – any liquid waste containing animal, vegetable, or chemical matter in suspension or solution from water closets, urinals, lavatories, bathtubs, laundry tubs or devices, floor drains, drinking fountains or other water-using fixtures. This does not include commercial or hazardous waste generating facility (MS ADC Health WW-1, Chapter 01, Section 102) [Added May 2002; Citation Revised March 2009; Revised March 2010].
- *Soil and Site Evaluation* - the evaluation to determine if a property can support an Individual On-Site Wastewater Disposal System by use of a soil auger to a depth of 5 feet to determine the soil texture, color, mottling and seasonal water table MS ADC Health WW-1, Chapter 01, Section 102) [Added March 2010].
- *State Permit* - a permit issued by the Permit Board to a person pursuant to regulations adopted by the Commission or Permit Board under Sections 49-17-17 and 49-17-29 of the Code for operation of a treatment works from which no discharges occur, for discharges into state waters where a NPDES or a UIC permit may not be applicable, or for discharges to a POTW where a pretreatment system is utilized (MDEQ, *Surface Water Division*, WPC-1, Section 1.A).
- *Temporary Water Service Connection* - a water connection made for the purpose of construction and site preparation after the Applicant has received his/her Permit/Recommendation from the Department and agreed

to have the Individual On-Site Wastewater Disposal System approved. This will be valid for 1 year, or until converted to a permanent water service connection, whichever comes first. Extensions may be granted in 6 month increments, if the residence is not complete and not being occupied (MS ADC Health WW-1, Chapter 01, Section 102) [Added March 2010].

- *Treatment Works* - any plant or other works, used for the purpose of treating, stabilizing, or holding wastes (MDEQ, *Surface Water Division*, WPC-1, Section 1.A) [Citation Revised May 2006].
- *Water Table* – the highest part of the soil or underlying rock that is wholly saturated with water. In some places an upper or Seasonal High Water Table may be separated from a lower one by a dry zone (MS ADC Health WW-1, Appendix 1, Section 103) [Added May 2002; Citation Revised March 2009; Revised March 2010].
- *Waters of the State* - all waters within the jurisdiction of the state including, streams, lakes, ponds, wetlands, impounding reservoirs, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, situated wholly or partially within or bordering upon the state, except lakes, ponds, or other surface waters which are wholly landlocked and privately owned and which are not regulated under the Federal *Clean Water Act* (CWA) (MDEQ, *Surface Water Division*, WPC-1, Section 1.A) [Citation Revised May 2006].
- *Waste* - sewage, industrial waste, oil field waste and all other liquid, gaseous, solid, radioactive, or other substances which may pollute or tend to pollute any waters of the state (MDEQ, *Surface Water Division*, WPC-1, Section 1.A) [Citation Revised May 2006].
- *Wastewater Facilities* - the pipelines or conduits, pumping stations, force mains, treatment plants, lagoons or any other structure, device, appurtenance or facility, whether operated individually or in any combination, used for collecting, treating and/or disposing of municipal or domestic wastewater, by either surface or underground methods, which is required to have a permit under the provisions of Miss. Code Ann. Section 49-17-29 (MDEQ, *Regulations for the Certification of Municipal and Domestic Wastewater Facility Operators*, Section 2) [Added May 2005].

<b>WASTEWATER MANAGEMENT GUIDANCE FOR MISSISSIPPI CHECKLIST USERS</b>	
<b>REFER TO CHECKLIST ITEMS:</b>	
Missing Checklist Items	WA.2.1.MS.
Discharges to the Environment	WA.5.1.MS. through WA.5.6.MS.
Permits	
NPDES	WA.10.1.MS. through WA.10.7.MS.
State Permits	WA.15.1.MS. through WA.15.4.MS.
Treatment Works	WA.20.1.MS. through WA.20.3.MS.
Individual Sewage Systems	WA.100.1.MS. and WA.100.14.MS.
Land Application of Sludge	
Notifications	WA.115.1.MS.
State-Specific Requirements	WA.130.1.MS. through WA.130.4.MS.

<b>GUIDANCE FOR MISSISSIPPI APPENDIX USERS</b>	
<b>REFER TO APPENDIX NUMBERS:</b>	<b>REFER TO APPENDIX TITLES:</b>
12-1	Maximum Plant Available Nitrogen (PAN) Levels to Be Applied to Cropland
12-2	Maximum Cumulative Heavy Metal Loading Rate to be Applied at Land Application Sites
12-3	Processes to Significantly Reduce Pathogens
12-4	Setback Requirements for Sensitive Waters

<b>COMPLIANCE CATEGORY:</b> <b>WASTEWATER MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>WA.2.</b></p> <p><b>MISSING CHECKLIST ITEMS</b></p> <p><b>WA.2.1.MS.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).</p>	<p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p>

<b>COMPLIANCE CATEGORY:</b> <b>WASTEWATER MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>WA.5.</b></p> <p><b>DISCHARGES TO THE ENVIRONMENT</b></p> <p><b>WA.5.1.MS.</b> Dischargers are prohibited from discharging certain substances (MDEQ, <i>Surface Water Division</i>, WPC-1, Section IV (A) (1)) [Citation Revised July 1997; Citation Revised May 2006].</p>	<p>Verify that the following wastes are not discharged into waters of the state:</p> <ul style="list-style-type: none"> <li>- radioactive, chemical, or biological warfare agent or high-level radioactive waste</li> <li>- any point source discharge that the Corps of Engineers finds would substantially impair anchorage or navigation</li> <li>- any point source discharge that is in conflict with an area-wide waste treatment discharge plan</li> <li>- a discharge that the Regional Administrator objects to in writing.</li> </ul>
<p><b>WA.5.2.MS.</b> [Moved June 1998].</p>	<p>(NOTE: Moved to WQ.115.3.MS., June 1998.)</p>
<p><b>WA.5.3.MS.</b> [Moved June 1998].</p>	<p>(NOTE: Moved to WQ.115.4.MS., June 1998.)</p>
<p><b>WA.5.4.MS.</b> [Moved June 1998].</p>	<p>(NOTE: Moved to WQ.115.5.MS., June 1998.)</p>
<p><b>WA.5.5.MS.</b> [Moved June 1998].</p>	<p>(NOTE: Moved to WQ.115.6.MS., June 1998.)</p>
<p><b>WA.5.6.MS.</b> [Moved June 1998].</p>	<p>(NOTE: Moved to WQ.115.7.MS., June 1998.)</p>

<b>COMPLIANCE CATEGORY: WASTEWATER MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>WA.10.</b></p> <p><b>PERMITS</b></p> <p><b>WA.10.1.MS.</b> Discharges into waters of the state must have a valid NPDES permit (MDEQ, <i>Surface Water Division</i>, WPC-1, Section I (B) and II (B)) [Revised July 1997; Revised April 1999; Citation Revised May 2006].</p>	<p>Verify that any person proposing a discharge of wastes to waters of the State or proposing a treatment works from which no discharge of wastes occurs files an application for an individual NPDES, UIC, or State permit.</p> <p>Verify that any person discharging wastes into surface waters of the State applies to the Permit Board for an NPDES permit, or for coverage under a general NPDES permit.</p> <p>Verify that any person discharging wastes or other fluids into underground waters of the State through the use of an injection well applies to the Permit Board for a UIC permit, unless otherwise exempted (see below).</p> <p>Verify that the discharger files an application at least 180 days before the commencement of a discharge that would require an NPDES.</p> <p>(NOTE: For purposes of NPDES permits (with the exception of Storm Water permits), commencement of activity means commencement of discharge. For purposes of Storm Water NPDES permits, State permits or UIC permits, commencement of activity means commencement of construction. In the case of NOI for coverage under an issued general NPDES permit or coverage under an issued general State permit, in accordance with a schedule established in such permit.)</p> <p>(NOTE: The following discharges that are exempt from NPDES permit requirements:</p> <ul style="list-style-type: none"> <li>- human sewage discharged from vessels</li> <li>- water, gas, or other materials injected into a well to facilitate the production of oil or gas</li> <li>- storm sewers exempted under 40 Code of Federal Regulations (CFR) 122.26 and not connected to a wastewater treatment works</li> <li>- wastes or other fluids authorized for injection into a Class V well</li> <li>- any introduction of pollutants from non point-source agricultural and silvicultural activities, including storm water runoff from orchards, cultivated crops, pastures, range lands and forest lands and return flows from irrigated agriculture; the following facilities are excluded from this exemption: <ul style="list-style-type: none"> <li>- discharges from concentrated animal feeding operations</li> <li>- discharges from concentrated aquatic animal production</li> <li>- discharges into aquaculture projects</li> <li>- discharges from silvicultural point sources</li> <li>- and any other facility and/or discharge required by these regulations to obtain a permit.)</li> </ul> </li> </ul>

<b>COMPLIANCE CATEGORY: WASTEWATER MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>WA.10.2.MS.</b> Dischargers must meet the terms and conditions of the discharge permit (MDEQ, <i>Surface Water Division</i>, WPC-1, Section IV (A) (13), (18), and (19)) [Citation Revised July 1997; Citation Revised May 2006; Revised March 2007].</p>	<p>Verify that the authorized discharge is consistent with the terms and conditions of that permit.</p> <p>Verify that the discharger keeps the facility in good working order and operates, as efficiently as possible, any facilities or systems of control installed to achieve compliance with the discharge permit.</p> <p>Verify that back-up or auxiliary facilities or similar systems are installed only when the operation is necessary to achieve compliance with the conditions of the permit.</p> <p>Verify that the discharger takes all reasonable steps to minimize or prevent any discharge in violation of the permit that is likely to have a detrimental effect on human health or the environment.</p>
<p><b>WA.10.3.MS.</b> Dischargers discharging a pollutant under the conditions of a permit must meet specific monitoring requirements (MDEQ, <i>Surface Water Division</i>, WPC-1, Section IV (A) (28) (c)) [Revised July 1997; Citation Revised May 2006].</p>	<p>Verify that discharges, authorized by an NPDES permit, that are required by the Regional Administrator to be monitored or which contain a toxic waste constituent, are monitored in the following way:</p> <ul style="list-style-type: none"> <li>- the discharge is measured in gallons per day</li> <li>- waste constituents subject to reduction or elimination are monitored</li> <li>- specific waste constituents determined by the Board are monitored</li> <li>- waste or wastewater constituents are monitored according to USEPA regulations</li> <li>- any other specific waste constituents which the Regional Administrator may request in writing.</li> </ul> <p>Verify that the discharger has a valid NPDES for the discharge of wastes into surface waters of the state.</p> <p>Verify that the discharger files an application at least 180 days before the commencement of a discharge that would require an NPDES.</p>
<p><b>WA.10.4.MS.</b> [Deleted May 2002].</p>	<p>(NOTE: Duplicate of WA.10.2.MS.).</p>
<p><b>WA.10.5.MS.</b> [Deleted June 1998].</p>	<p>(NOTE: This checklist item was a repeat of WA.10.3.MS.)</p>

<b>COMPLIANCE CATEGORY: WASTEWATER MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>WA.10.6.MS.</b> Dischargers must meet specific requirements for reporting discharges (MDEQ, <i>Surface Water Division</i>, WPC-1, Sections IV (A) (10), (14), and (15) (a)) [Citation Revised July 1997; Citation Revised May 2006].</p>	<p>Verify that the discharger provides the Permit Board with written notice of compliance or noncompliance within 14 days after the compliance date set by the Board.</p> <p>Verify that any facility expansion, production increase, process modification, or changes in discharge volume are reported to the Permit Board.</p> <p>Verify that dischargers with POTWs notify the Board of any of the following activities:</p> <ul style="list-style-type: none"> <li>- the production of any new waste or wastewater constituents into the treatment works which would be considered a new source</li> <li>- any introduction of waste constituents into the treatment works which would be subject to Federal regulation</li> <li>- any substantial change in volume or character of waste constituents being introduced into the treatment works by a source discharging into the treatment works at the time of issuance of a permit.</li> </ul>
<p><b>WA.10.7.MS.</b> Dischargers must meet specific requirements for monitoring and compliance reporting (MDEQ, <i>Surface Water Division</i>, WPC-1, Section IV (A) (29)) [Revised July 1997; Citation Revised May 2006].</p>	<p>Verify that the discharger keeps a copy of the written notice of compliance or noncompliance a minimum of 3 yr.</p> <p>Verify that the discharger reports the results of all required monitoring activities to the Board at least once a year, except Pretreatment permits, which are reported at least twice a year.</p> <p>Verify that the discharger reports to the Board within 24 h of becoming aware of any instances of noncompliance.</p> <p>Verify that the oral report to the Board is followed by a written report within 5 days and contains the following information:</p> <ul style="list-style-type: none"> <li>- a description of the noncompliance and its cause, if known</li> <li>- the period of noncompliance including exact dates, or if not corrected, the anticipated time the noncompliance is expected to continue</li> <li>- the steps taken to reduce, eliminate and prevent the recurrence of the noncomplying discharge.</li> </ul> <p>Verify that all instances of noncompliance not reported under the previous paragraph (Chapter 1, Section IV (A)(29)(e)), are reported within 30 days</p>



<b>COMPLIANCE CATEGORY: WASTEWATER MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>WA.15.</b></p> <p><b>STATE PERMITS</b></p> <p><b>WA.15.1.MS.</b> Dischargers that discharge into a POTW, or operate a treatment works with no discharge, must have a valid state permit (MDEQ, <i>Surface Water Division</i>, WPC-1, Section I (B) and II (B)) [Citation Revised July 1997; Revised April 1999; Citation Revised May 2006].</p>	<p>Verify that any person operating a treatment works from which no discharge of wastes occurs applies to the Permit Board for a State permit or for coverage under a general State permit.</p> <p>Verify that any person discharging wastes into a publicly owned treatment works which are subject to Federal pretreatment standards (40 CFR 403), or which, in the opinion of the Permit Board, would cause interference with the proper operation of the POTW, cause violations of water quality standards by passing through the POTW, or cause contamination of sludges which would limit or prevent the proper disposal of the sludge, applies to the Permit Board for a State permit.</p> <p>(NOTE: The following discharges are exempt from state permit requirements:</p> <ul style="list-style-type: none"> <li>- human sewage discharged from vessels</li> <li>- water, gas, or other materials injected into a well to facilitate the production of oil or gas</li> <li>- storm sewers exempted under 40 Code of Federal Regulations (CFR) 122.26 and not connected to a wastewater treatment works</li> <li>- wastes or other fluids authorized for injection into a Class V well</li> <li>- any introduction of pollutants from non point-source agricultural and silvicultural activities, including storm water runoff from orchards, cultivated crops, pastures, range lands and forest lands and return flows from irrigated agriculture; the following facilities are excluded from this exemption: <ul style="list-style-type: none"> <li>- discharges from concentrated animal feeding operations</li> <li>- discharges from concentrated aquatic animal production</li> <li>- discharges into aquaculture projects</li> <li>- discharges from silvicultural point sources</li> <li>- and any other facility and/or discharge required by these regulations to obtain a permit.)</li> </ul> </li> </ul> <p>Verify that the discharger files an application at least 180 days before the commencement of a discharge that would require a state permit.</p> <p>(NOTE: For purposes of NPDES permits (with the exception of Storm Water permits), commencement of activity means commencement of discharge. For purposes of Storm Water NPDES permits, State permits or UIC permits, commencement of activity means commencement of construction. In the case of NOI for coverage under an issued general NPDES permit or coverage under an issued general State permit, in accordance with a schedule established in such permit.)</p>

<b>COMPLIANCE CATEGORY:</b> <b>WASTEWATER MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>WA.15.2.MS.</b> Dischargers must meet the terms and conditions of the discharge permit (MDEQ, <i>Surface Water Division</i>, WPC-1, Section IV (A) (10), (14), and (15)) [Citation Revised July 1997; Citation Revised May 2006].</p> <p><b>WA.15.3.MS.</b> Dischargers must meet specific requirements for reporting discharges (MDEQ, <i>Surface Water Division</i>, WPC-1, Section IV (A) (10), (14), and (15)) [Citation Revised July 1997; Citation Revised May 2006].</p> <p><b>WA.15.4.MS.</b> Dischargers that divert surface water must meet permit requirements (MDEQ, <i>Surface and Groundwater Use and Protection Regulations</i>, Section II(C) (2)).</p>	<p>Verify that the discharge authorized by the permit is consistent with the terms and conditions of that permit.</p> <p>Verify that the discharger keeps the facility in good working order and operates, as efficiently as possible, any facilities or systems of control installed to achieve compliance with the discharge permit.</p> <p>Verify that the discharger takes all reasonable steps to minimize or prevent any discharge in violation of the permit that is likely to have a detrimental effect on human health or the environment.</p> <p>Verify that the discharger provides the Permit Board with written notice of compliance or noncompliance within 10 days after the compliance date set by the Board.</p> <p>Verify that any facility expansion, production increase, process modification, or changes in discharge volume are reported to the Permit Board.</p> <p>Verify that dischargers with POTWs notify the Board of any of the following activities:</p> <ul style="list-style-type: none"> <li>- the production of any new waste or wastewater constituents into the treatment works which would be considered a new source</li> <li>- any introduction of waste constituents into the treatment works which would be subject to Federal regulation</li> <li>- any substantial change in volume or character of waste constituents being introduced into the treatment works by a source discharging into the treatment works at the time of issuance of a permit.</li> </ul> <p>Verify that dischargers with facilities, equipment, or devices that withdraw or divert surface water installed after 1 April 1985 have a permit.</p> <p>(NOTE: The following surface water withdrawals or diversion are exempt from this permit requirement:</p> <ul style="list-style-type: none"> <li>- withdrawals or diversions for domestic purposes or systems supplying water for domestic use which are not defined as a public water system under the SDWA</li> <li>- withdrawals or diversions from an impoundment that is not located on a continuous free flowing watercourse</li> <li>- withdrawals or diversions from fish farming ponds for the purpose of harvesting fish or draining or reconditioning ponds</li> <li>- withdrawals or diversions from state or private water supplies for</li> </ul>

<b>COMPLIANCE CATEGORY:</b> <b>WASTEWATER MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
	construction project water supplies or for dredging operations.)

<b>COMPLIANCE CATEGORY:</b> <b>WASTEWATER MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>WA.20.</b></p> <p><b>TREATMENT WORKS</b></p> <p><b>WA.20.1.MS.</b> Treatment works must report any changes or proposed changes in sewage collection systems (MDEQ, <i>Surface Water Division</i>, WPC-1, Section IV (A) (15) and (B)) [Citation Revised July 1997; Citation Revised May 2006].</p> <p><b>WA.20.2.MS.</b> Operators of wastewater treatment plants must be certified (MDEQ, <i>Regulations for the Certification of Municipal and Domestic Wastewater Facility Operators</i>, Section 1) [Added April 1999].</p> <p><b>WA.20.3.MS.</b> Operators of wastewater treatment plants must meet state-specific requirements (MDEQ, <i>Regulations for the Certification of Municipal and Domestic Wastewater Facility Operators</i>, Section 5) [Added April 1999].</p>	<p>Verify that the Federal facility submits any plans for modification of municipal or domestic sewage collection systems to the Commissioner prior to the beginning of construction</p> <p>(NOTE: Commercial, industrial, and institutional establishments installing treatment works with a capacity of 10,000 gal/day or less that do not receive state or USEPA grants and do not, or will not, require a UIC permit do not need to submit plans to the Commissioner.)</p> <p>Verify that all municipal and domestic wastewater treatment plants are operated by persons who are certified as qualified to operate such facilities.</p> <p>Verify that, in the event of temporary loss of an operator, notice is immediately given to the Department.</p> <p>(NOTE: The continued operation of a facility without a certified operator may proceed on an interim basis for a period not to exceed 180 days, except for good cause shown upon petition to the Department.)</p> <p>(NOTE: These regulations do not pertain to a wastewater treatment facility treating wastewater generated solely by an industry and owned and operated by the industry.)</p> <p>Verify that certified operators in charge of wastewater facilities personally visit the facilities at a sufficient frequency and duration to perform any tasks required by the permit and to ensure proper operation and management of the wastewater facilities.</p> <p>Verify that, unless otherwise stated in the facility's permit, certified operators in charge of wastewater facilities visit the facilities, as a minimum, according to the following schedule:</p> <ul style="list-style-type: none"> <li>- Class I facilities, 1 day per week</li> <li>- Class II facilities, 2 days per week</li> <li>- Class III facilities, 3 days per week</li> <li>- Class IV facilities, 5 days per week.</li> </ul>

<b>COMPLIANCE CATEGORY:</b> <b>WASTEWATER MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
	<p>Verify that certified operators in charge of wastewater facilities are thoroughly familiar with all monitoring and reporting requirements mandated by the facility's permit and ensure the facility complies with these requirements.</p> <p>Verify that certified operators in charge of wastewater facilities maintain written documentation of each facility visit, and that this documentation is made available to the Department upon request.</p>

<b>COMPLIANCE CATEGORY: WASTEWATER MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>WA.100.</b></p> <p><b>INDIVIDUAL SEWAGE SYSTEMS</b></p> <p><b>WA.100.1.MS.</b> Onsite wastewater disposal systems must meet specific location standards (Mississippi State Department of Health (MSDH), MS ADC Health WW-1, Appendix 1, Section 104) [Added June 1998; Citation Revised April 1999; Revised May 2006; Revised March 2007; Revised March 2009; Revised March 2010].</p>	<p>Verify that all components of the onsite wastewater disposal system shall be located a minimum of:</p> <ul style="list-style-type: none"> <li>- 5 feet from any dwelling</li> <li>- 10 feet from any property line.</li> </ul> <p>Verify that any vessel holding wastewater is located a minimum of 50 feet from any public, private or individual potable water source.</p> <p>Verify that the effluent disposal field is located at a lower elevation or in a landscape position that will preclude any surface runoff from flowing in the direction of the well site and a minimum of 100 feet from any public, private or individual potable water source.</p> <p>Verify that potable water lines do not pass under or through any part of the sewage disposal system.</p> <p>(NOTE: Where a water supply line must cross a sewer line, the bottom of the water service within ten feet of the point of crossing, shall be at least 12 inches above the top of the sewer line. The sewer line shall be of Schedule 40 pipe with cemented joints at least ten feet on either side of the crossing. Water and sewer lines shall not be laid in the same trench. The water and sewer lines, when laid on the same elevation, shall maintain a minimum separation distance of 10 feet.)</p> <p>Verify that the surface of or the surface above the disposal field is not used for vehicular traffic or vehicular parking.</p> <p>Verify that no portion of an onsite wastewater disposal system is located under dwellings or other permanent structures.</p> <p>Verify that effluent disposal systems are not located in depressed areas where surface water will accumulate and provisions are made to minimize the flow of surface water over the effluent disposal field.</p> <p>Verify that subsurface wastewater disposal fields located on slopes of less than 8 percent have a minimum setback from recreational waters, shellfish waters or other sensitive areas (see Appendix 12-4).</p> <p>Verify that subsurface wastewater disposal fields located on slopes of greater than 8 percent are located a minimum of 100 feet from recreational waters, shellfish</p>

<b>COMPLIANCE CATEGORY:</b> <b>WASTEWATER MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
	<p>waters and other sensitive areas.</p> <p>Verify that subsurface disposal installation do not have slopes of greater than 30 percent.</p> <p>Verify that where all or part of the onsite wastewater disposal system is proposed to be installed on property other than the owner's, an easement in perpetuity is legally recorded in the proper county.</p> <p>Verify that the easement is of sufficient area to permit access, construction and maintenance of the onsite sewage disposal system.</p> <p>Verify that a site for an effluent disposal field or expansion area is not located wholly within an area which is frequently flooded, swamp, marsh, or wetland.</p> <p>(NOTE: If permits have been issued by the proper regulatory agency authorizing the use of wetlands for building sites, the property must be evaluated using standard soil and site criteria for IOWDS.)</p> <p>Verify that there is maintained a minimum of 12 inches of unsaturated soil between the bottom of the subsurface disposal system and a perched or seasonal water table in soils that contain a restrictive horizon (fragipan, chalk, bedrock, clay or silty clay) within 5 feet of the surface.</p> <p>Verify that there is maintained a minimum of 24 inches of unsaturated soil between the bottom of the subsurface disposal system and any perched or seasonal water table in soils that do not contain a restrictive horizon (fragipan, chalk, bedrock, clay or silty clay) within 5 feet of the surface.</p> <p>Verify that easements or right-of-way areas for utilities, surface or subsurface drainage, roads, streets, ponds or lakes are not used for location of individual onsite sewage disposal systems.</p>
<b>WA.100.2.MS.</b> [Deleted May 2006].	(NOTE: <i>Regulation Governing Individual Onsite Wastewater Disposal Systems</i> revised.)
<b>WA.100.3.MS.</b> Each home or place of employment must be provided with a properly constructed and maintained sanitary method of liquid human waste disposal (MSDH, <i>Regulation Governing Individual Onsite</i>	<p>Verify that, at each home where people reside and at each establishment or place where people are employed or congregate, a sanitary method is provided for the disposal of all human excreta and other liquid waste.</p> <p>Verify that all homes and places mentioned above where a system of sanitary sewers is available have a properly constructed sewer connection to said sewer system into which all human excreta and other liquid waste is disposed.</p>

<b>COMPLIANCE CATEGORY: WASTEWATER MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><i>Wastewater Disposal Systems</i>, WW-1, Chapter 01, Section 103 [Added May 2002; Revised March 2009; Revised March 2010].</p> <p><b>WA.100.4.MS.</b> On-site wastewater disposal systems must meet pre-installation/installation and approval requirements (MSDH, <i>Regulation Governing Individual Onsite Wastewater Disposal Systems</i>, Chapter 01, Section 106 and 109) [Added May 2002; Citation Revised March 2009; Revised March 2010].</p>	<p>Verify that, where a system of sanitary sewers is not available, all human excreta and other liquid waste is disposed of into a properly constructed and maintained on-site wastewater disposal system.</p> <p>Verify that no system is permitted to discharge in a manner which may create a public health hazard or which may result in the wastewater leaving the property of the generator.</p> <p>Verify that liquid wastes from homes or business establishments, offices, and places where people reside, are employed, or congregate, not covered in preceding sections, are disposed of in a manner which will not jeopardize public health, welfare or the environment.</p> <p>Verify that, prior to construction of any mobile, modular or permanently constructed residence requiring the installation of an individual on-site wastewater disposal system, the developer or owner submits a Notice of Intent to the Department.</p> <p>(NOTE: New residential water service connection will not be provided unless the owner, lessee or developer shows proof of submission of the Notice of Intent and presents a copy to the water supplier.)</p> <p>(NOTE: The Department will provide such owner or developer with complete information on individual onsite wastewater disposal systems, including but not limited to applicable rules and regulations regarding the design, construction, installation, operation, and maintenance of individual on-site wastewater disposal systems and known requirements of lending institutions, except in cases where a professional engineer provides services relating to design, construction or installation of the individual on-site wastewater disposal system. The approved system will be a design based system or performance based system.)</p> <p>Verify that the Soil and Site Evaluation is performed as soon as possible but not later than 5 working days after the Notice of Intent has been submitted.</p> <p>Verify that the system is approved for a permanent water connection.</p> <p>(NOTE: The Environmentalist shall make a final inspection of the system as constructed. If the design, construction and installation of such system are in accordance with the rules and regulations of the Department, and upon receipt of the installer's affidavit, fee, and maintenance agreement (where applicable), approval shall be granted. Appendix 1 through 13 of WW-1 detail design standards for specific types of individual on-site wastewater disposal systems.)</p> <p>(NOTE: If a Certified Professional Evaluator designs, constructs or installs or directly supervises the construction or installation of a Design-based Individual On-Site Wastewater Disposal System in accordance with the regulation and</p>



<p align="center"><b>COMPLIANCE CATEGORY: WASTEWATER MANAGEMENT Mississippi Supplement</b></p>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>WA.100.5.MS.</b> Existing on-site wastewater disposal systems that do not discharge off the property of the generator must meet specific criteria (MSDH, <i>Regulation Governing Individual Onsite Wastewater Disposal Systems</i>, WW-1, Chapter 01, Sections 110 and 111) [Added May 2002; Revised March 2009; Revised March 2010].</p>	<p>stamps the appropriate documentation with that Certified Professional Evaluator's number, the Department shall approve the design, construction or installation of the system, if requested. Approval shall be granted only after the Environmentalist has determined that all administrative requirements stated in this Regulation have been satisfied.)</p> <p>(NOTE: The Department must approve or disapprove the request, for site evaluation, within 15 working days following submission of all required documentation. If the Department disapproves the request, the Department shall state in writing the reasons for the disapproval. If the Department does not respond to the request within 15 working days, the request for approval of an Individual On-site Wastewater Disposal System shall be deemed approved.)</p> <p>Verify that existing Individual On-site Wastewater Disposal Systems meet the following requirements to be considered accepted:</p> <ul style="list-style-type: none"> <li>- the lot is located in an area or subdivision where Individual On-site Wastewater Disposal Systems are considered acceptable under this chapter</li> <li>- the residence, building or facility has previously been occupied for a period of time deemed by the Department necessary to determine the functioning capability of the Individual On-site Wastewater Disposal System</li> <li>- the system is functioning properly with no evidence that any insufficiently treated effluent is or has been seeping to the surface of the ground and any discharge of treated effluent is confined within the boundaries of the property of the generator</li> <li>- if a private water supply well is present, the well is located at a higher elevation than the disposal system and is protected from surface contamination by a concrete slab of a thickness of at least 4 inches extending at least 2 feet in all directions from the well casing.</li> </ul> <p>Verify that, if an existing residential Individual On-site Wastewater Disposal System is malfunctioning, the system is replaced, where possible, with a system meeting all requirements.</p> <p>Verify that, if replacement of the existing system is not possible, the existing system is repaired to reduce the volume of effluent, to adequately treat the effluent and to the greatest extent possible, to confine the discharge to the property of the generator.</p> <p>Verify that existing systems that do not discharge off the property of the generator, are inspected and considered accepted.</p> <p>Verify that, for systems that have not been occupied for the required time, soil and site evaluations have been completed and system recommendations given.</p> <p>Verify that, in all cases where existing systems fail inspection, these systems are repaired or replaced with fully functioning systems meeting all regulatory</p>

<b>COMPLIANCE CATEGORY: WASTEWATER MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
	<p>requirements.</p> <p>(NOTE: Repairs to Conventional Individual On-site Wastewater Disposal Systems do not have to be approved by the Department, as long as part of the existing system is utilized.)</p> <p>Verify that repairs to alternative disposal systems are in compliance and have a signed affidavit from property owner agreeing to a continued maintenance agreement with a certified maintenance provider.</p> <p>Verify that repairs are performed by a Certified Installer.</p>
<p><b>WA.100.6.MS.</b> Individual on-site wastewater disposal systems must meet treatment prohibitions (MSDH, <i>Regulation Governing Individual Onsite Wastewater Disposal Systems</i>, Chapter 01, Section 113) [Added May 2002; Citation Revised March 2007; Citation Revised March 2009; Revised March 2010].</p>	<p>Verify that Individual On-site Wastewater Disposal System is not used to treat and dispose of:</p> <ul style="list-style-type: none"> <li>- waste from commercial slaughter houses</li> <li>- embalming wastes from funeral homes</li> <li>- any waste containing high levels of any contaminants that might pollute groundwater or endanger drinking water supplies</li> <li>- other waste determined by the Department.</li> </ul>
<p><b>WA.100.7.MS.</b> [Deleted March 2007].</p>	<p>(NOTE: This checklist item was incorporated in WA.100.1.MS.).</p>
<p><b>WA.100.8.MS.</b> Individual on-site wastewater disposal system installers must meet certification and license requirements (MSDH, <i>Regulation Governing Individual Onsite Wastewater Disposal Systems</i>, Chapter 02, Sections 105) [Added May 2002; Revised May 2006; Citation Revised March 2007; Revised March 2009; Revised March 2010].</p>	<p>Verify that onsite sewage/wastewater treatment and disposal systems are installed by certified installers.</p> <p>(NOTE: An individual may install a system on his/her own property and a professional engineer may operate as an installer without being certified.)</p> <p>Verify that the certified installer who designs or installs the system signs files an affidavit with the county health department that he/she has constructed the system in compliance with all applicable regulations.</p>

<b>COMPLIANCE CATEGORY: WASTEWATER MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>WA.100.9.MS.</b> Individual on-site wastewater disposal systems must meet disposal requirements (MSDH, <i>Regulation Governing Individual Onsite Wastewater Disposal Systems</i>, Section 121.03) [Added May 2002; Revised May 2006; Revised March 2007].</p>	<p>Verify that all septage is disposed of in a manner consistent with regulations promulgated by the Mississippi State Board of Health and the Commission on Environmental Quality.</p> <p>Verify that written permission is obtained from the Department of Environmental Quality, Office of Pollution Control, when waste is to be disposed of into a public or community wastewater treatment facility.</p> <p>Verify that, if disposal is proposed by any other means, approval of the method and location is obtained from the Department of Environment Quality, prior to receiving a license.</p>
<p><b>WA.100.10.MS.</b> [Deleted May 2006].</p>	<p>(NOTE: <i>Regulation Governing Individual Onsite Wastewater Disposal Systems</i> was revised.)</p>
<p><b>WA.100.11.MS.</b> The removal of sludge and septage must meet licensing and equipment requirements (MSDH, <i>Regulation Governing Individual Onsite Wastewater Disposal Systems</i>, Chapter 02, Section 106) [Added May 2002; Revised May 2006; Revised March 2007; Revised March 2010].</p>	<p>Verify that persons engaged in the business or practice of removing sludge and septage from the individual onsite wastewater disposal system are licensed by the Department.</p> <p>Verify that all vehicles engaged in septage removal or hauling carry the name and address of the contractor and the license number on both sides of the vehicle.</p> <p>Verify that all equipment used is capable of delivering the septage to its intended destination without spillage or loss of septage while en route.</p> <p>Verify that the carrier tank has a minimum holding capacity of 1.250 gallons, effective, September 30, 2010.</p> <p>Verify that the Department is notified within 10 working days of adding, replacing or deleting the inventory of vehicles for the purpose of updating application of any change in address, business partnership or affiliation, or any other status that affects his/her standing as a Certified Pumper.</p> <p>Verify that a record is kept on all systems cleaned, pumped and disposed of by address, type of treatment unit, amount pumped, and receipt of disposal at waste treatment facility permitted by the Mississippi Department of Environmental Quality.</p> <p>Verify that records are made available at time of the inspection by the Department and are retained for a minimum of 2 years.</p> <p>Verify that pumping and transporting of septage is delivered in a manner that is</p>

<b>COMPLIANCE CATEGORY: WASTEWATER MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>WA.100.12.MS.</b> Individual onsite wastewater disposal must meet general, minimum requirements (MSDH, <i>Regulation Governing Individual Onsite Wastewater Disposal Systems</i>, Chapter 1, Section 105.02 and 105.03) [Added March 2009].</p> <p><b>WA.100.13.MS.</b> Temporary onsite wastewater disposal systems in unapprovable areas must meet specific requirements (MSDH, <i>Regulation Governing Individual Onsite Wastewater Disposal Systems</i>, Chapter 1, Section 112) [Added March 2009; Revised March 2010].</p>	<p>safe and does not create a nuisance or public health hazard.</p> <p>Verify that the carrier tank is labeled "SEPTAGE AND LIQUID WASTE ONLY" at or near the inlet and outlet valve with the required lettering a minimum of 2 inches in height.</p> <p>Verify that human excreta and undigested sludge is not used as fertilizer.</p> <p>Verify that individual onsite wastewater disposal systems that require periodic maintenance are maintained in accordance with factory specifications and recommendations of the Health Authority and the contents disposed of in a manner approved by the Health Authority.</p> <p>Verify that all abandoned earth pits used for the disposal of human excreta are properly filled with earth in a manner approved by the Health Authority.</p> <p>Verify that no individual wastewater disposal system, new or existing, is located as to create a hazard to any potable (public or private) well, spring, cistern, water reservoir, suction line or abandoned well.</p> <p>Verify that no individual wastewater disposal system intended for the disposal of human excreta or other liquid or solid wastes is constructed so that its contents can pass into any underground water-bearing stratum that is or might be used for a drinking water supply.</p> <p>Verify that abandoned wells are not used for the disposal of human excreta or other liquid waste.</p> <p>(NOTE: Temporary individual onsite wastewater disposal systems may be approved in otherwise unapprovable areas only after a contract has been awarded for the construction of municipal or community sewers that upon completion will adequately serve the property.)</p> <p>Verify that, if a proposed central system is not completed and available for use within 6 months, a complete IOWDS complying with all requirements is installed.</p> <p>Verify that, upon completion of the sewer construction the onsite system is abandoned and connection made to the sewer.</p> <p>(NOTE: If the proposed central system will be available and ready for use within a period not to exceed 6 months, or where a minor extension is to be made to a municipal system by the municipality and no contract is to be awarded, an IOWDS with a minimum capacity of 300 gallons capacity and at least 60 percent</p>

<b>COMPLIANCE CATEGORY: WASTEWATER MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>WA.100.14.MS.</b> Recreational vehicle campgrounds must operate under a permit (MS ADC Health WW-2, Section 4.4 and 4.13) [Added March 2009].</p> <p><b>WA.100.15.MS.</b> Discontinued septic tanks must meet abandonment requirements (MS ADC Health WW-1, Chapter 01, Section 108.01) [Added March 2010].</p>	<p>of the required disposal system may be installed.)</p> <p>Verify that the professional engineer designing the sewer system has certified in writing that the public sewer or extension will be completed within 6 months, and the owner of the temporary system has certified in writing that connection to the public sewer will be made as soon as it becomes available.</p> <p>Verify that any recreational vehicle campground within the State of Mississippi holds a valid permit issued annually by the Department.</p> <p>(NOTE: All applications for permits shall be made, prior to any construction of the campground, to the applicable county health department which shall issue a permit only after a final inspection of the completed RV campground has indicated all requirements of the regulations are met. No permit shall be transferable from one location to another location or from one person to another person.)</p> <p>(NOTE: Exemptions:</p> <ul style="list-style-type: none"> <li>- All organized campgrounds holding a valid license from the Mississippi State Department of Health, issued under Sections 75-74-1 et. sec, Mississippi Code of 1972 (Mississippi Youth Camp Safety and Health Law) and deer camps regulated under Section 49-7-39 Mississippi Code of 1972</li> <li>- Section 4.7(2) of this regulation (space requirements) will be waived for all recreational vehicle parks existing prior to the original July 13, 1983 enactment of this regulation that provide water and sewer service from systems that have been approved or permitted by the Mississippi State Department of Health or Department of Environmental Quality</li> <li>- Any parcel or tract of land wherein living sites are available only for the private use of family members</li> <li>- Fairgrounds and stadiums that allow parking of recreational vehicles for short-term events such as fairs, festivals and ball games shall not be defined as a campground</li> <li>- Recreational vehicle dealers, providing factory authorized service and/or repair with, 5 or fewer overnight parking facilities for customers seeking such repair/service.)</li> </ul> <p>Verify that, when the use of a sewage septic tank is discontinued the tank is abandoned, and its further use is prohibited.</p> <p>Verify that septic tanks are properly pumped out by the Certified Pumper.</p> <p>(NOTE: An empty tank may be removed at the property owner's option.)</p> <p>Verify that any hole left by removal is filled with sand or soil.</p>

<b>COMPLIANCE CATEGORY:</b> <b>WASTEWATER MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
	Verify that an empty tank left in place is crushed and then filled with sand or soil.

<b>COMPLIANCE CATEGORY:</b> <b>WASTEWATER MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>LAND APPLICATION OF SLUDGE</b></p> <p><b>WA.115. Notifications</b></p> <p><b>WA.115.1.MS.</b> Notice must be provided to future landowners if substances that may be deleterious to human health are placed on the land in amounts that are in excess of those established as acceptable for growing food chain crops (MDEQ, Division of Ground Water and Solid Waste, Nonhazardous Solid Waste Management Regulations (SW-2), Section VIII: P) [Citation Revised July 1997; Citation Revised May 2006; Citation Revised March 2008].</p>	<p>Determine whether substances that may be deleterious to human health are placed on the land in amounts that are in excess of those established as acceptable for growing food chain crops.</p> <p>Verify that notice of the placement of these substances is given to future landowners via notice to the deed.</p> <p>(NOTE: When soil analyses show that such levels of contaminants are no longer present, the notice to future landowners is not required.)</p>

<b>COMPLIANCE CATEGORY: WASTEWATER MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<b>LAND APPLICATION OF SLUDGE</b>  <b>WA.130. State Specific Requirements</b>  <b>WA.130.1.MS.</b> Land application sites must meet design and operational requirements (MDEQ, SW-2, Section VIII: B through D) [Citation Revised July 1997; Citation Revised May 2006].  <b>WA.130.2.MS.</b> Wastes at land application sites must be applied uniformly and incorporated into the soil during or immediately after application (MDEQ, SW-2, Section VIII: E) [Citation Revised May 2006].  <b>WA.130.3.MS.</b> Soil at land application sites must be maintained according to specific requirements (MDEQ, SW-2, Section VIII: F through I) [Citation Revised July 1997; Revised May 2006].	<p>Verify that no waste is placed on saturated ground</p> <p>(NOTE: Saturation may be determined by digging a hole 1-ft deep at the lowest point of the ground and observing for 30 min. If water appears in the hole, the soil is considered to be saturated.)</p> <p>Verify that the land application site is located in a hydrologic section where the historic high water table is at a safe depth below the zone of incorporation.</p> <p>Verify that the application area is located a minimum of 300 ft from any inhabited building unless the applicant can justify otherwise.</p> <p>(NOTE: The Department may require larger buffer zones when circumstances warrant.)</p> <p>Verify that wastes are applied uniformly and incorporated into the soil during or immediately following application.</p> <p>(NOTE: Very dilute sludges which are applied to pasture land or existing grassland may be exempted from this requirement by the Permit Board.)</p> <p>Verify that wastes containing significant amounts of nitrogen are not applied at rates which exceed the plant available nitrogen levels specified in Appendix 12-1, unless data can be presented to justify otherwise.</p> <p>Verify that soil pH is maintained at or above 6.5 unless otherwise authorized by the Department.</p> <p>Verify that the loading rate for cadmium does not exceed 0.45 pound/acre/year.</p> <p>Verify that the cumulative (lifetime) application of heavy metals does not exceed the levels specified in Appendix 12-2.</p>



<b>COMPLIANCE CATEGORY:</b> <b>WASTEWATER MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>WA.130.4.MS.</b> Sewage sludge at land application sites must be managed according to specific requirements (MDEQ, SW-2, Section VIII: J through N) [Citation Revised July 1997; Citation Revised May 2006].</p>	<p>Verify that, where sewage sludge is applied to public lands, access to the facility is controlled to restrict unauthorized personnel during operation and for at least 12 mo following final application.</p> <p>Verify that, where sewage sludge is applied, grazing by animals is restricted during operation and for 30 days thereafter.</p> <p>Verify that sewage sludge is treated by a process to significantly reduce pathogens prior to application or incorporation.</p> <p>(NOTE: Processes to significantly reduce pathogens are listed in Appendix 12-3.)</p> <p>Verify that no crops consumed raw by humans are planted where sewage sludge is applied until at least 18 mo have passed from the date of the last application.</p> <p>Verify that all other crops grown for indirect human consumption are planted where sewage sludge has been applied no sooner than 30 days after the date of the last application.</p> <p>(NOTE: Limitations may be placed on the loading rates for other contaminants to protect the environment and public health.)</p>

## Appendix 12-1

### Maximum Plant Available Nitrogen (PAN) Levels to Be Applied to Cropland

(Source: MDEQ: SW-2 Section VIII: Table 1)

Crop	Maximum Pan (Lb/Acre/Yr)
Bahia grass	160
Bermuda grass	300
Fescue	120
Grain sorghum	180
Silage sorghum	300
Millet	150
Rye grass	220
Alfalfa, clover, vetch	450
Cotton	180
Corn	240
Soybeans	300
Wheat	135

## Appendix 12-2

### Maximum Cumulative Heavy Metal Loading Rate to be Applied at Land Application Sites

(Source MDEQ: SW-2, Section VIII: Table 2) [Citation Revised May 2006]

Metals Loading Rates			
Cation Exchange Capacity (MEQ/100)	Less than 5 Kg/ha (lb/ac)	5-15 kg/ha (lb/ac)	Greater than 15 kg/ha (lb/ac)
Lead (Pb)	500 (455)	1000 (890)	2000 (1780)
Zinc (Zn)	250 (222)	500 (445)	1000 (890)
Copper (Cu)	125 (111)	250 (222)	500 (445)
Nickel (Ni)	125 (111)	250 (222)	500 (445)
Cadmium (Cd)	5 (4.4)	10 (8.9)	20 (17.8)

### Appendix 12-3

#### Processes to Significantly Reduce Pathogens

(Source: MDEQ: SW-2, Section VIII: Table 3) [Citation Revised May 2006]

- *Aerobic Digestion:* The process is conducted by agitating sludge with air or oxygen to maintain conditions at residence times ranging from 60 days at 15 Degrees C to 40 days at 20 Degrees C, with a volatile solids reduction of at least 38 percent.
- *Air Driving:* Liquid sludge is allowed to drain and/or dry on under-drained sand beds, or paved or unpaved basins in which the sludge is at a depth of 9 in. A minimum of 3 mo is needed, 2 mo of which temperatures average on a daily basis above 0 Degrees C.
- *Anaerobic Digestion:* The process is conducted in the absence of air at residence time ranging from 60 days at 20 Degrees C to 15 days at 35 Degrees C to 55 Degrees C, with a volatile solids reduction of at least 38 percent.
- *Composting:* Using the within-vessel, static aerated pile or windrow composting methods, the solid waste is maintained at minimum operating conditions of 40 Degrees C for 5 days. For 4 h during this period the temperature exceeds 55 Degrees C.
- *Lime Stabilization:* Sufficient lime is added to produce a pH of 12 after 2 h.
- *Other Methods:* Other methods or operating conditions may be acceptable if pathogens and vector attraction of the waste (volatile solids) are reduced to an extent equivalent to the reduction achieved by any of the above methods.

## Appendix 12-4

### Setback Requirements for Sensitive Waters

(Source: MS ADC Health WW-1, Appendix 1, Section 104) [Added March 2009; Citation Revised March 2010].

Setback Requirements from Sensitive Waters For all Subsurface Absorption Field Areas on Slopes of 8 Percent or Less:

*Soil Class	Textural	Minimum Distance From Water Edge
-------------	----------	----------------------------------

Gravel (Skeletal)		Not Applicable
-------------------	--	----------------

Coarse to medium sand, fine sand, loamy sand, sandy loam, silty clay, clay		100 Ft.
---	--	---------

Loam, silt, silt loam, sandy clay loam, Silty clay loam, clay loam,		50 Ft.
---	--	--------

\*The texture of the subsoil material having the greatest permeability rates within the absorption area, inclusive of material to a depth of two feet below the absorption trenches or beds.



## SECTION 13

### WATER QUALITY MANAGEMENT

#### Mississippi Supplement, March 2010

This section covers the state requirements for Water Quality Management and is intended to supplement the TEAM Guide. Refer to the TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

The Mississippi State Department of Health (MSDH), Mississippi Primary Drinking Water Regulation (PDW-1), incorporates the following National Primary Drinking Water Regulations:

- 40 Code of Federal Regulations (CFR) 141.52 and 141.63 (Maximum Contaminant Levels for Microbiological)
- 40 CFR 141.11, 141.23 (d and e), 141.51, 141.60, 141.62 (b and c), and 141.80 (Inorganic Chemicals)
- 40 CFR 141.50, 141.60, and 141.61 (Organic Chemicals)
- 40 CFR 141.13, 141.73, and 141.173 (Turbidity)
- 40 CFR 141.15, 141.16, 141.55 and 141.66 (Radionuclides)
- 40 CFR 141.21 and 141.21 except for the following:
  - 141.21(a) (2) concerning the reduction in monitoring frequency for community water systems serving less than 1000 persons
  - 141.21(a) (5) concerning the waiver of the time limit for sampling after a turbidity sample exceeds 1 NTU
  - 141.21(b) (1) concerning waiver of the time limit for resampling
  - 141.21(b) (3) concerning the collection of large volume repeat samples in containers of and size
  - 141.21(b) (5) concerning the waiver of the requirement to take five repeat samples the month after a total coliform positive sample
  - 141.21(c) (1) (ii) and 141.21(c) (1) (iii) concerning the invalidation of total coliform positive samples
  - 141.21(d) concerning agents other than the State conducting sanitary surveys
  - 141.21(e) (2) concerning the waiver of fecal coliform or *Escherichia coli* testing on total coliform positive samples
- 40 CFR 141.23, 141.86, 141.87, 141.88, and 141.89 (Inorganic Chemical Sampling and Analyses) except for Section 141.23(a) (4) which allows the composting of samples
- 40 CFR 141.24, 141.30, and 141.40 (Organic Chemical Sampling and Analyses) except for Sections 141.24(f) (14), (h) (10), and 141.40(n) (9) which allow the composting of samples
- 40 CFR 141.25 and 141.26 (Radionuclides)
- 40 CFR 141.22 and 141.74 (Turbidity Sampling and Analysis)
- 40 CFR 141.74 and 141.174 (Filtration and Disinfection)
- 40 CFR 141.41 and 141.42 (Miscellaneous Contaminants)
- 40 CFR 141.76, 141.81, 141.82, 141.83, 141.110, and 141.135 (Treatment Techniques)
- 40 CFR 141.31, 141.32, 141.35, 141.75, 141.90, 141.91, 141.134, and 141.175 (Reporting Requirements)
- 40 CFR 141.31, 141.35, 141.73 and 141.75
- 40 CFR 141.32, 141.35, and 141.85 (Public Notification)
- 40 CFR 141.34 (Lead)
- 40 CFR 141.5 (Fluoride)
- 40 CFR 141.33, 141.35, 141.75, 141.134, 141.155, 141.175, 142.14, 142.15, and 142.62 (Record Maintenance)
- 40 CFR 141.70 (General Requirements for Filtration and Disinfection)
- 40 CFR 141.71 (Criteria for Avoiding Filtration)
- 40 CFR 141.72 (Disinfection)
- 40 CFR 141.71 and 141.73 (Filtration)
- 40 CFR 141.84 (Lead Service Line Replacement)
- 40 CFR 141.130, 141.53, 141.54, 141.64, and 141.65 (All Disinfectant Residuals, Disinfectant Byproducts, and Disinfection Byproduct Precursors)

- 40 CFR 141.130, 141.31, 141.32, and 141.33 (All Disinfectant Residuals, Disinfectant Byproducts, and Disinfection Byproduct Precursors Sampling and Analyses)
- 40 CFR 141.12 and 141.64 (Total Trihalomethanes)
- 40 CFR 141.30, 141.130, 141.131 and 141.32 (Total Trihalomethane Sampling and Analyses)
- 40 CFR 141.151, 141.152, 141.153, 151.154, 141.155 (Consumer Confidence Reports).

The regulations concerning safe drinking water apply to all public water systems with the exception of public water systems that either: consist only of distribution and storage facilities with no collection and treatment facilities; obtain all water from, but are not owned or operated by, a public water system to which such regulations apply; or do not sell water to any person. These protocols cover regulations that are additions to the adopted Federal regulations.

(MSDH, Mississippi Primary Drinking Water Regulation (PDW-1), Section 100.02)

## Definitions

- *Adjusted Fluoridated Water System* - a public water system that adjusts the fluoride concentration in the drinking water to the optimal level for consumption (within the recommended control range) (Mississippi Department of Health, PDW-2, Section 100.02) [Added March 2010].
- *Community Water System (CWS)* - any water system serving piped water for human consumption to fifteen (15) or more individual service connections used year-round by consumers or regularly serving twenty-five (25) or more individual consumers year-round, including, but not limited to, any collection, pretreatment, treatment, storage and/or distribution facilities or equipment used primarily as part of, or in connection with such system, regardless of whether or not such components are under the ownership or control of the operator of such system (Mississippi Department of Health, PDW-2, Section 100.02) [Added March 2010].
- *Cross Connection* - any direct interconnection between a public water system and a non-public water system or other source which may result in the contamination of the drinking water provided by the public water system. This definition includes any arrangement of piping where a potable water line is connected to non potable water; it may be a pipe-to-pipe connection where potable and non potable water lines are directly connected, or a pipe-to-water connection where the potable water outlet is submerged in non potable water. If the potable and non-potable source are separated by gate valves, check valves or devices other than the appropriate backflow preventer as outlined by this regulation, a cross connection exists. By-pass arrangements, jumper connections, swivel or change over assemblies, or other temporary or permanent assemblies through which, or because of which, backflow may occur are considered to be cross connections (MSDH, Mississippi Primary Drinking Water Regulation (PDW-1), Section 100.02) [Added May 1999; Citation Revised March 2007; Citation Revised March 2009].
- *Department* - the Mississippi Department of Health (MSDH, Mississippi Primary Drinking Water Regulation (PDW-1), Section 100.02) [Added May 1999; Citation Revised March 2007; Citation Revised March 2009].
- *Dewatering* - the temporary lowering of the groundwater level to facilitate installation of underground utilities, construction of foundations, and various other purposes (MDEQ, Office of Land and Water Resources, LW-3, I) [Added May 2005].
- *Director* - the Executive Officer of the Mississippi Department of Health or its authorized agent (MSDH, Mississippi Primary Drinking Water Regulation (PDW-1), Section 100.02) [Citation Revised March 2007; Citation Revised March 2009].
- *Domestic Use* - the use of water for ordinary household purposes, the watering of non-commercial farm livestock, poultry, and domestic animals, and the irrigation of home gardens and lawns (MDEQ, Office of Land and Water Resources, LW-3, I) [Added May 2005].



- *Entry Point* - a location following one or more finished (fluoridated) water sampling points but prior to the beginning of the distribution system of the public water system (Mississippi Department of Health, PDW-2, Section 100.02) [Added March 2010].
- *Federal Act* - the Safe Drinking Water Act (SDWA) of 1974, cited as Public Law (PL) 93-523, or any subsequent revisions thereof (MSDH, Mississippi Primary Drinking Water Regulation (PDW-1), Section 100.02) [Citation Revised March 2007; Citation Revised March 2009].
- *Geotechnical Boring* - a hole constructed for the purpose of sampling, measuring, or testing the strata encountered for scientific, engineering, geological or regulatory purposes (MDEQ, Office of Land and Water Resources, LW-3, I) [Added May 2005].
- *Natural Fluoride Content* - the concentration of fluoride in milligrams per liter (mg/L) that is present in the water source from naturally occurring fluoride sources (Mississippi Department of Health, PDW-2, Section 100.02) [Added March 2010].
- *Operator* - the certified waterworks operator who directly supervises and is personally responsible for the daily operation and maintenance of a community or non-transient non-community public water system (MSDH, *Part III, Subpart 72, Chapter 02, Regulations Governing the Certification of Municipal and Domestic Water System Operators*, Section 100.02) [Added May 2005; Citation Revised March 2007; Citation Revised March 2009].
- *Optimal Fluoride Level in Mississippi* - the amount of fluoride in water that is found naturally or adjusted within a recommended control range of 0.71.3 parts per million fluoride (ppm) with the optimal fluoride level being 0.8 ppm (Mississippi Department of Health, PDW-2, Section 100.02) [Added March 2010].
- *Licensee* - any individual who holds a valid Water Well Contractor's License issued by the state, or any company or corporation engaged in the business of water well contracting under a license duly issued to a designated principal, or key employee, in the company or corporation. Licenses will only be issued to individuals, and a company will be deemed to be licensed only if it has a principal or key employee who is licensed (MDEQ, Office of Land and Water Resources, LW-3, I) [Added May 2005].
- *Part-time Operator* - any certified waterworks operator who is employed as the certified waterworks operator for a public water system and is not considered a full-time employee of the public water system. This definition shall include certified waterworks operators who are serving as the certified waterworks operator for public water systems through privately owned operating companies (MSDH, *Part III, Subpart 72, Chapter 02, Regulations Governing the Certification of Municipal and Domestic Water System Operators*, Section 100.02) [Added May 2005; Citation Revised March 2007; Citation Revised March 2009].
- *Parts Per Million* - a unit of measurement that is equivalent to 1 milligram per liter (mg/L) where the density of the liquid measured is 1.0 gram per cubic centimeter (the density of water is 1.0) (Mississippi Department of Health, PDW-2, Section 100.02) [Added March 2010].
- *Person* - the state or other agency or institution thereof, any municipality, political subdivision, public or private corporation, individual, partnership, association or other entity, and includes any officer or governing or managing body of any municipality, political subdivision, or public or private corporation, or the United States or any officer or employee thereof (MSDH, *Part III, Subpart 72, Chapter 02, Regulations Governing the Certification of Municipal and Domestic Water System Operators*, Section 100.02) [Added May 2005; Citation Revised March 2007; Citation Revised March 2009].
- *Permitted use* - (MDEQ, Office of Land and Water Resources, LW-2, I and LW-3, I) [Added May 2005].

1. the use of a specific amount of water at a specific time and at a specific place, authorized and allotted by the Board for a designated beneficial use within specific limits as to quantity, time, place, and rate of diversion or withdrawal; or
  2. the right to the use of water as specified in the permit, subject to the provisions of Mississippi Code Annotated Section 51-3-5, including the construction of waterworks or other related facilities.
- *Professionally Installed* - installed in a workmanlike manner with no apparent errors in installation (MSDH, Mississippi Primary Drinking Water Regulation (PDW-1), Section 100.02) [Added May 2002; Citation Revised March 2007; Citation Revised March 2009].
  - *Potable Water* - Water that is suitable for human consumption and meets all primary drinking water standards (Primary Maximum Contaminant Levels) set by the United States Environmental Protection Agency (EPA) (MDEQ, Office of Land and Water Resources, LW-2, I and LW-3, I) [Added May 2005].
  - *Public Water System (CWS)* - a system for the provision to the public of water for human consumption through pipes or, after August 5, 1998, other constructed conveyances, if such system has at least fifteen service connections or regularly serves an average of at least twenty-five individuals daily at least 60 days out of the year (Mississippi Department of Health, PDW-2, Section 100.02) [Added March 2010].
  - *Responsible Charge* - a certified operator, holding a Department waterworks operator's license at a class equivalent to or higher than the class of the water system, who is officially designated by the owner or responsible official of the water system as the operator responsible for making all decisions regarding the daily operational activities of the public water system including all components of the water system such as treatment plants, water wells, distribution systems, etc. Under special circumstances, the Department may authorize a water system to have more than one operator in responsible charge (MSDH, *Part III, Subpart 72, Chapter 02, Regulations Governing the Certification of Municipal and Domestic Water System Operators*, Section 100.02) [Added May 2005; Citation Revised March 2007; Citation Revised March 2009].
  - *Raw Water* - defined as water that has not been treated or had fluoride injected into it by the CWS and that contains only naturally occurring levels of fluoride (Mississippi Department of Health, PDW-2, Section 100.02) [Added March 2010].
  - *Surface Water* - water occurring on the surface of the ground (MDEQ, Office of Land and Water Resources, LW-2, I) [Added May 2005].
  - *UIC* - underground injection control (Mississippi Department of Environmental Quality (MDEQ), *Wastewater Regulations for National Pollutant Discharge Elimination System Permits, Underground Injection Control Permits, State Permits, Water Quality Based Effluent Limitations and Water Quality Certification*, Chapter One, Section I.A).
  - *UIC Permit* - a permit issued by the Permit Board to a person pursuant to regulations adopted by the Commissioner or the Permit Board (MDEQ, *Wastewater Regulations for National Pollutant Discharge Elimination System Permits, Underground Injection Control Permits, State Permits, Water Quality Based Effluent Limitations and Water Quality Certification*, Chapter One, Section I.A).
  - *UIC Program* - the underground injection control program established by the SDWA (MDEQ, *Wastewater Regulations for National Pollutant Discharge Elimination System Permits, Underground Injection Control Permits, State Permits, Water Quality Based Effluent Limitations and Water Quality Certification*, Chapter One, Section I.A).
  - *Waste* - sewage, industrial waste, oil field waste, and all other liquid, gaseous, solid, radioactive, or other substances which may pollute or tend to pollute any waters of the state (MDEQ, *Wastewater Regulations for*

*National Pollutant Discharge Elimination System Permits, Underground Injection Control Permits, State Permits, Water Quality Based Effluent Limitations and Water Quality Certification, Chapter One, Section I.A).*

- *Waters of the State* - all waters within the jurisdiction of this state, including all streams, lakes, ponds, impounding reservoirs, marshes, watercourses, waterways, wells, springs, and all other bodies or accumulations of water, surface and underground, natural or artificial, situated wholly or partly within or bordering the state; except lakes, ponds or other surface waters which are wholly landlocked and privately owned, and which are not regulated under the Clean Water Act (MDEQ, Office of Land and Water Resources, LW-2, I) [Added May 2005].
- *Well or Water Well* - a hole that is drilled, driven, bored, excavated, or otherwise penetrated into the ground to access, evaluate and/or withdraw ground water. For purposes of this regulation, this definition does not pertain to wells constructed for the purpose of disposal of fluids or other materials, but does include: (MDEQ, Office of Land and Water Resources, LW-2, I and LW-3, I) [Added May 2005].
  1. *Abandoned Well* - a well that has not been used within the preceding twelve month period, or one that has had the pump disconnected and/or removed for reasons other than maintenance, repair, or replacement
  2. *Dewatering Well* - a well used for temporary removal of surface water or groundwater to facilitate construction or mining operations, or for permanent protection of a structure or activity from the effects of surface water or groundwater
  3. *Monitoring Well* - a well used to obtain data on the quality of water in an aquifer system or at specified depths and locations related to a potential source of pollutant
  4. *Observation Well* - a well used primarily for measuring the water level in an aquifer
  5. *Recovery Well* - a well constructed for the purpose of recovering undesirable groundwater for treatment or removal of contaminants
  6. *Relief Well* - a well constructed to provide pressure relief from an artesian aquifer or from excessive head differentials in water table aquifers
  7. *Replacement Well* - a well drilled to replace an existing well that has become unusable, provided the new well meets the requirements set forth in these regulations
  8. *Standby Well* - a well that can be placed in operation to withdraw water but is only used when water is temporarily unavailable from the primary source or sources because of mechanical failure, maintenance, or power failure
  9. *Test Well* - a well drilled to explore for groundwater for a water supply well
  10. *Underground Discharge Well* - a well in which the top of the casing terminates at a discharge head located below the frostline.

**WATER QUALITY MANAGEMENT  
GUIDANCE FOR MISSISSIPPI CHECKLIST USERS**

**REFER TO CHECKLIST ITEMS:**

Missing Checklist Items	WQ.2.1.MS.
Public Water Systems	WQ.10.1.MS. through WQ.10.6.MS.
Monitoring/Sampling	WQ.15.1.MS. and WQ.15.2.MS.
Disinfection and Filtration	WQ.20.1.MS.
Lead and Copper	WQ.25.1.MS.
Notification and Reporting Requirements	[Deleted]
Community Water Systems	
Standards	WQ.35.1.MS.
Drinking Water Wells	WQ.90.1.MS. through WQ.90.7.MS.
Miscellaneous Wells	WQ.100.1.MS. through WQ.100.7.MS.
Underground Injection Control (UIC)	
All Wells	WQ.109.1.MS. through WQ.109.4.MS.
Class I Wells	WQ.110.1.MS. through WQ.110.4.MS.
Water Quality Standards	WQ.115.1.MS. through WQ.115.7.MS.
Water Use Permits	WQ.120.1.MS. and WQ.120.2.MS.

**GUIDANCE FOR MISSISSIPPI APPENDIX USERS**

**REFER TO APPENDIX NUMBERS:**

**REFER TO APPENDIX TITLES:**

13-1	Acute and Chronic Toxicity Values For All Waters (micrograms/L)
13-2	Numerical Groundwater Standards
13-3	Bodies of Water Classified as Public Water Supplies
13-4	Water Quality Criteria for Sources of Public Water Supplies
13-5	Bodies of Water Classified as Shellfish Harvesting Areas
13-6	Bodies of Water Classified as Recreation Waters

<b>COMPLIANCE CATEGORY:</b> <b>WATER QUALITY MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>WQ.2.</b></p> <p><b>MISSING CHECKLIST ITEMS</b></p> <p><b>WQ.2.1.MS.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding).</p>	<p>Determine whether any new regulations have been issued since the finalization of the manual.</p> <p>Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.</p> <p>Verify that the Federal facility is in compliance with all applicable and newly issued regulations.</p>

<b>COMPLIANCE CATEGORY:</b> <b>WATER QUALITY MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>PUBLIC WATER SYSTEMS</b></p> <p><b>WQ.10. General</b></p> <p><b>WQ.10.1.MS.</b> Plans must be approved prior to the construction of a new public water system or alteration of an existing public water system (MSDH, <i>Mississippi Primary Drinking Water Regulation (PDW-1)</i>, Section 100.05) [Revised May 1999; Citation Revised March 2007; Revised March 2009].</p> <p><b>WQ.10.2.MS.</b> Cross connections are prohibited unless a backflow preventer is installed (MSDH, <i>Mississippi Primary Drinking Water Regulation, (PDW-1)</i>, Section 104) [Added May 1999; Revised June 2001; Revised May 2002; Citation Revised March 2007; Citation Revised March 2009].</p>	<p>Verify that plans and specifications have been submitted to the Director and received approval prior to the construction of a new community or non-transient non-community public water system or prior to significant extensions or alterations to an existing community or non-transient non-community public water system that may effect the operation of that system.</p> <p>Verify that each new community or non-transient non-community public water systems submits an operation and maintenance plan for review and approval by the Director, and that the plan is approved prior to beginning construction.</p> <p>(NOTE: Plans and specification for changes to an existing community or non-transient non-community public water systems will not be approved if the Director determines the changes would threaten the viability of the water system or if the changes may overload the operational capabilities of the water system.)</p> <p>Verify that there are no cross connections between a public water system and any other non-public water system, or a line from any container of liquids or other substances, unless an approved backflow prevention assembly is installed between the public water system and the source of contamination.</p> <p>Verify that when the public water system learns of the cross connection, it notifies the property owner in writing within 10 days that the cross connection is eliminated or that a proper backflow preventer is installed.</p> <p>Verify that there are no direct connections between a public water supply and sewer or storm sewer.</p> <p>(NOTE: A connection between a public water system and a service or other water system not hazardous to health but not meeting established water quality standards for public water systems and not cross connected within its system with a potentially dangerous substance is considered a low hazard category cross connection.)</p> <p>Verify that there is an appropriate backflow prevention assembly or device approved by the Department installed for low hazard cross connections.</p> <p>(NOTE: Cross connections that are considered as low hazard posing very low risk and not required to have a backflow prevention device include:</p>

<b>COMPLIANCE CATEGORY: WATER QUALITY MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
	<ul style="list-style-type: none"> <li>- any lawn sprinkler or irrigation system that is connected to a public water system and was professionally installed, regardless of whether the system is underground or above ground or whether the system has pop-up sprinkler heads</li> <li>- any swimming pool that is connected to a public water system and was professionally installed or any swimming pool connected to a public water system and has a fill line with an anti-siphon air gap</li> <li>- any water fountain or cooler that provides drinking water for human consumption that is connected to a public water system and was professionally installed</li> <li>- any fire sprinkler system that contains only water or a drain pipe and no chemicals that is connected to a public water system and was professionally installed</li> <li>- any commercial establishment that is connected to a public water system that contains no cross connections directly with a dangerous or hazardous substance or material.)</li> </ul> <p>Verify that a low hazard category cross connection is eliminated or protected by the installation of the appropriate backflow preventer within one year of the notification to the property owner by the public water system.</p> <p>(NOTE: A connection between a public water system and a non-public water system or other source of contamination which has or may have any material in the water dangerous to health, or connected to any material dangerous to health, that is or may be handled under pressure, or subject to negative pressure, is considered a high hazard category cross connection.)</p> <p>Verify that, for high hazard category cross connections, the cross connection is eliminated by air gap separation or is protected by the installation of an appropriate backflow prevention assembly or device approved by the Department for high hazard cross connections.</p> <p>Verify that any lawn sprinkler system or lawn irrigation system that is connected to a public water system and either injects or stores lawn chemicals or is connected to a wastewater supply, thereby considered a high hazard cross connection, is protected by the installation of a backflow prevention assembly or device.</p> <p>Verify that a high hazard category cross connection is eliminated or protected by the appropriate backflow preventer within 90 days of the notification to the property owner by the public water system.</p> <p>(NOTE: The distinction between low hazard cross connection and high hazard cross connections will be made by an authorized representative of the public water system subject to review by the Department.)</p> <p>Verify that the public water system inspects and tests existing backflow preventers</p>

<b>COMPLIANCE CATEGORY:</b> <b>WATER QUALITY MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>WQ.10.3.MS.</b> Public water supplies must have a cross connection control policy and conduct surveys (MSDH, <i>Mississippi Primary Drinking Water Regulation, (PDW-I)</i>, Section 105.01 and 105.02) [Added May 1999; Citation Revised June 2001; Citation Revised March 2007; Revised March 2009].</p>	<p>within 90 days of identification that there is a cross connection present.</p> <p>(NOTE: Testing can be done only by a Department certified tester.)</p> <p>(NOTE: If no backflow preventer is installed, then the public water system must discontinue service until one is installed.)</p> <p>Verify that all public water supplies adopt and enforce a cross connection control policy or ordinance that establishes a cross connection control program consisting of the following:</p> <ul style="list-style-type: none"> <li>- locating and eliminating unprotected cross connections</li> <li>- preventing the occurrence of new cross connections with the public water system</li> <li>- maintaining records pertaining to the location of existing backflow prevention assemblies, type and size of each assembly and results of all tests of backflow prevention assemblies by a tester certified by the Department.</li> </ul> <p>Verify that each public water system conducts surveys and on-site visits as necessary to locate existing cross connections.</p> <p>(NOTE: Single family dwellings and multi-family dwellings will not be included in this survey unless the officials of the public water system have reason to believe that a cross connection exists.)</p> <p>Verify that the survey is performed by an authorized representative of the public water system utilizing established written guidelines as published by the Department.</p>
<p><b>WQ.10.4.MS.</b> Public water supplies must meet installation, testing, and repair requirements for back flow prevention devices (MSDH, <i>Mississippi Primary Drinking Water Regulation (PDW-I)</i>, Section 106.02 and 107.01) [Added May 1999; Citation Revised June 2001; Revised May 2002; Citation Revised March 2007; Revised March 2009].</p>	<p>Verify that reduced pressure principle backflow prevention assemblies, double check valve assemblies, and pressure vacuum breaker assemblies are installed in a location that provides adequate access for testing and repair of the assembly.</p> <p>Verify that reduced pressure principle backflow prevention assemblies and double check valve assemblies are not subject to possible flooding. Reduced pressure principle backflow prevention assemblies and double check valve assemblies are not located in a pit below ground level.</p> <p>Verify that, when a reduced pressure principle backflow prevention assembly, double check valve assembly, or pressure vacuum breaker assembly is installed, inspection and testing of the assembly, where required, is performed by an individual who has been licensed as a Certified Tester by the Department.</p> <p>Verify that each backflow prevention assembly is inspected and tested by a</p>



<b>COMPLIANCE CATEGORY:</b> <b>WATER QUALITY MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>WQ.10.5.MS.</b> Municipal and domestic community water and non-transient noncommunity water systems must have certified operators (MSDH, <i>Part III, Subpart 72, Chapter 02, Regulations Governing the Certification of Municipal and Domestic Water System Operators</i>, Section 100.03) [Added May 2005; Citation Revised March 2007; Revised March 2009].</p>	<p>Certified Tester after installation and before use by the customer and at least once a year by a Certified Tester.</p> <p>Verify that the Certified Tester provides the property owner and the public water system with a written report of the inspection and test results on each assembly tested.</p> <p>Verify that the Certified Tester and the public water system retain all backflow prevention assembly test and inspection results for at least 5 years from the date of test and inspection.</p> <p>Verify that reduced pressure principle backflow prevention assemblies and pressure vacuum breaker assemblies that fail to function properly or fail the routine required test are repaired or replaced within 30 days of identification of the failure.</p> <p>Verify that double check valves that fail to function properly are repaired or replaced within 90 days of identification of the failure.</p> <p>Verify that all municipal and domestic community water systems and all non-transient noncommunity water systems are operated by persons who are certified by the Mississippi State Department of Health as qualified to operate such facilities.</p> <p>(NOTE: Certificates shall be valid for 3 years from the date of issuance, unless suspended, revoked or invalidated for cause.)</p> <p>Verify that, in the event of temporary loss of an operator, notice is immediately given to the Division.</p> <p>(NOTE: The system may operate without a certified operator, for a period not to exceed one 180 days, except for good cause shown upon petition to the Division.)</p> <p>Verify that any person allowed to actually make physical changes on a public water system that impact water quality or quantity holds a waterworks operator's license issued by the Department at a class equivalent to or higher than the class of the public water system.</p> <p>(NOTE: Classes of Water Systems:  Class E: Water systems that purchase water only and do not provide additional treatment. This classification shall also apply to waterworks operators whose only job responsibility is the operation and maintenance of distribution system(s). The certified operator in responsible charge shall be available 24 hours a day to address system needs and problems as they occur  Class D: Water systems with no treatment other than chlorination and/or fluoridation or direct chemical feed such as polyphosphate. The certified operator</p>

<b>COMPLIANCE CATEGORY:</b> <b>WATER QUALITY MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>WQ.10.6.MS.</b> Certified waterworks operators must meet reporting and log keeping requirements (MSDH, <i>Part III, Subpart 72, Chapter 02, Regulations Governing the Certification of Municipal and Domestic Water System Operators</i>, Section 106) [Added May 2005; Citation Revised March 2007; Citation Revised March 2009].</p>	<p>in responsible charge shall be available 24 hours per day to address system needs and problems as they occur  Class C: Water systems with aeration, pH adjustment, corrosion control or closed pressure filtration treatment facilities including zeolite softening or iron removal. The certified operator in responsible charge shall be available 24 hours per day to address system needs and problems as they occur  Class B: Water systems with two (2) or more Class C treatment facilities of different types, or with iron or manganese removal facilities breaking pressure or requiring flocculation and/or sedimentation. The certified operator in responsible charge shall be available 24 hours per day to address system needs and problems as they occur. Class A. Systems with surface water treatment, lime softening, or coagulation and filtration for the removal of constituents other than iron or manganese. A licensed class A operator shall be onsite whenever the treatment plant for a Class A public water system treating surface water is in operation. The certified operator in responsible charge shall be available 24 hours per day to address system needs and problems as they occur.)</p> <p>Verify that each certified waterworks operator submits an annual Public Water System Operating Agreement to the Department for each public water system where the operator is performing, on a part-time basis, the duties and responsibilities of the official certified waterworks operator.</p> <p>Verify that each certified waterworks operator maintains a Public Water System Operations Log Book for each public water system where he serves as the official certified waterworks operator.</p> <p>(NOTE: The log book must be maintained using standard forms provided by or approved by the Department and must be available for inspection by Division staff during normal working hours.)</p>

<b>COMPLIANCE CATEGORY:</b> <b>WATER QUALITY MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<b>PUBLIC WATER SYSTEMS</b>  <b>WQ.15. Monitoring/ Sampling</b>  <b>WQ.15.1.MS.</b> Suppliers of water must utilize the services of a certified laboratory for water quality analyses (MSDH, <i>Mississippi Primary Drinking Water Regulation (PDW-1)</i> , Section 103.05) [Citation Revised June 2001; Citation Revised March 2007; Citation Revised March 2009].  <b>WQ.15.2.MS.</b> Suppliers of water must not composite sampling for inorganic and organic sampling and analyses (MSDH, <i>Mississippi Primary Drinking Water Regulation (PDW-1)</i> , Section 102.02 and 102.03) [Added March 2009].	<p>Verify that suppliers of water utilize the services of a certified laboratory to complete all required water quality analyses.</p> <p>Verify that suppliers of water do not composite sampling for inorganic and organic sampling and analyses.</p> <p>(NOTE: Inorganic Chemical Sampling and Analyses. It shall be the responsibility of each supplier of water to comply with the inorganic chemical sampling/analysis requirements, analytical techniques, and water quality parameters as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.6, 141.23, 141.86, 141.87, 141.88 and 141.89 except that the following optional provisions of Title 40 Code of Federal Regulations are not adopted: Section 141.23 (a)(4) and Section 141.88(a)(1)(iv) which allow compositing of samples.)</p> <p>(NOTE: Organic Chemical Sampling and Analyses. It shall be the responsibility of each supplier of water to comply with the organic chemical sampling and analysis requirements as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.6, 141.24, 141.30 and 141.40 except that the following optional provisions of Title 40 Code of Federal Regulations are not adopted: Sections 141.24 (f) (14) and (h) (10) and Section 141.40 (n)(9) which allow compositing of samples.)</p>

<b>COMPLIANCE CATEGORY: WATER QUALITY MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>PUBLIC WATER SYSTEMS</b></p> <p><b>WQ.20</b> <b>Disinfection and Filtration</b></p> <p><b>WQ.20.1.MS.</b> Public water system that uses a surface water source or a ground water source under the direct influence of surface water must meet Federal and state requirements (MSDH, <i>Mississippi Primary Drinking Water Regulation (PDW-I)</i>, Section 103.07 (4)) [Added March 2009].</p>	<p>Verify that a public water system that uses a surface water source or a ground water source under the direct influence of surface water and does not meet all of the criteria in Title 40 Code of Federal Regulations Section 141.171 for avoiding filtration complies with the treatment requirements as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.173, 141.550-141.553, and 141.560-141.564.</p> <p>Verify that a public water system that uses a surface water source or a ground water source under the influence of surface water arranges for the conduct of a comprehensive performance evaluation by the Department or a third party approved by the Department within 30 days of exceeding the filter performance triggers stipulated by the National Primary Drinking Water Regulations published under Title 40 Code of Federal Regulations Section 141.175 (b)(4).</p> <p>Verify that, based upon the results of this comprehensive performance evaluation, the public water system arranges for the completion of a composite correction program developed in accordance with current EPA guidance documents.</p> <p>Verify that the composite correction program is submitted to the Department for review and approval prior to actual implementation.</p> <p>Verify that the public water system implements the approved composite correction program on a time schedule approved by the Department as stipulated in Title 40 Code of Federal Regulations Section 142.16(g)(1) and 142.16(j)(1).</p>

<b>COMPLIANCE CATEGORY:</b> <b>WATER QUALITY MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>PUBLIC WATER SYSTEMS</b></p> <p><b>WQ.25.</b> <b>Lead and Copper</b></p> <p><b>WQ.25.1.MS.</b> All pipe, solder, or flux used in a public water system or any plumbing that provides water for human consumption must be lead free (MSDH, <i>Mississippi Primary Drinking Water Regulation (PDW-1)</i>, Section 105.05 (7) and (8)) [Citation Revised May 1999; Citation Revised March 2007; Citation Revised March 2009].</p>	<p>Verify that any pipe, solder, or flux used in a public water system, or any plumbing in a residential or nonresidential facility providing water for human consumption which is connected to a public water system, is lead free.</p> <p>(NOTE: Solders and flux are defined as lead free when they contain less than 0.2 percent lead, and pipes are considered lead free when they contain less than 8.0 percent lead.)</p>

<p align="center"><b>COMPLIANCE CATEGORY:</b>  <b>WATER QUALITY MANAGEMENT</b>  <b>Mississippi Supplement</b></p>		
<p align="center"><b>REGULATORY REQUIREMENTS:</b></p>	<p align="center"><b>REVIEWER CHECKS:</b>  <b>March 2010</b></p>	
<p><b>PUBLIC WATER SYSTEMS</b></p> <p><b>WQ.30.</b>  <b>Notification and Reporting Requirements</b></p> <p><b>WQ.30.1.MS.</b>      [Deleted  March 2007].</p>	<p>(NOTE:   MSDH, <i>Mississippi Primary Drinking Water Regulation (PDW-1)</i>, Section 103 states that supplier of water must meet the reporting, public notification, education, and record maintenance requirements as stipulated in the National Primary Drinking Water Regulations.)</p>	

<b>COMPLIANCE CATEGORY: WATER QUALITY MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>COMMUNITY WATER SYSTEMS</b></p> <p><b>WQ.35. Standards</b></p> <p><b>WQ.35.1.MS.</b> Community water systems (CWS) serving at least 2,000 must provide fluoridation treatment, monitoring, and reporting (Mississippi Department of Health, PDW-2, Section 100.01, 101, 102, and 103) [Added March 2010].</p>	<p>Verify that the monthly average fluoride content of all required water samples have fluoride content within the optimal fluoride control range of 0.71.3 parts per million fluoride (ppm) with the optimal fluoride level being 0.8 ppm.</p> <p>Verify that a minimum of 3 water samples are taken by designated CWS personnel on different days each week at all entry points and analyzed for fluoride content.</p> <p>Verify that, at least once each month at each entry point, designated CWS personnel divide (split) one sample (hereinafter referred to as the split sample) and have one portion analyzed for fluoride by designated CWS personnel and the other portion analyzed by the Department's laboratory or a private lab certified by the Department for fluoride testing.</p> <p>Verify that designated CWS personnel use water sample fluoride content results to compare with a calculated fluoride dosage to verify fluoridation program operation.</p> <p>(NOTE: The calculated dosage is defined as the calculated amount of fluoride that has been added to a water system. The calculation is based on the total amount of fluoride (weight) that was added to the water system and the total amount of water (volume) that was produced plus the naturally occurring fluoride at the source.)</p> <p>Verify that designated CWS personnel collect no less than 13 water samples per month from each entry point for analysis for fluoride and at least 90 percent of collected samples have fluoride content within the optimal fluoride control range.</p> <p>Verify that the split sample result determined through analysis by designated CWS personnel agree with the result analyzed by the Department within a range of <math>\pm 0.2</math> ppm in at least nine of 12 months during the calendar year.</p> <p>Verify that designated CWS personnel submit a report of the results of required water sample testing each month to the Department and include the type of fluoride chemical used.</p> <p>Verify that each CWS that fluoridate list in the Consumer Confidence Report the number of months in the previous calendar year that average sample results from a certified laboratory were within the optimal range.</p> <p>Verify that each CWS that fluoridates list in the Consumer Confidence Report the</p>

<b>COMPLIANCE CATEGORY:</b> <b>WATER QUALITY MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
	<p>percentage of all samples collected in the previous calendar year that sample results were within the optimal range.</p> <p>(NOTE: Systems shall not be required to comply unless sufficient funds are identified by the Department, whether by appropriation, capital outlay, grants or similar means or source of funds, as available to that system for the cost of acquiring and installing fluoridation equipment, and the cost of material required to fluoridate said system for at least one year from the date of initial installation.)</p>



<b>COMPLIANCE CATEGORY:</b> <b>WATER QUALITY MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>WQ.90.</b></p> <p><b>DRINKING WATER WELLS</b></p> <p><b>WQ.90.1.MS.</b> Water wells must be permitted and well drillers must be licensed (MDEQ, Office of Land and Water Resources, LW-2, II(C) and LW-3, II) [Added June 1998; Revised May 2004; Revised May 2005; Citation Revised May 2006].</p>	<p>(NOTE: These requirements are repeated in WQ.100.1.MS. and permitting requirements are repeated in WQ.120.1.MS. )</p> <p>Verify that groundwater withdrawal wells are permitted before use of groundwater from the well begins.</p> <p>(NOTE: Wells for the purpose of groundwater withdrawal meeting the following conditions are not subject to the permitting requirements:</p> <ul style="list-style-type: none"> <li>- wells used for domestic purposes and providing potable water to only 1 household</li> <li>- wells with a surface casing diameter less than six inches, except as regulations govern prohibited uses specified in Section IV.D. and reporting requirements specified in Section IV.E</li> <li>- relief wells installed to protect the integrity of a structure, such as a dam or levee.</li> </ul> <p>The fact that a well may be exempt under this regulation does not relieve the owner of responsibility for complying with other applicable state or federal regulations; e.g., wells, regardless of size, that are part of a Public Water System must comply with Mississippi State Department of Health Regulations.)</p> <p>Verify that water wells are drilled only by well drillers licensed in the state of Mississippi, or by employees of firms possessing a Mississippi well drillers license.</p> <p>Verify that either a licensed water well contractor or an employee certified by the is on site and personally supervising operations during all critical stages of the drilling and completion of a potable water well including, but not limited to, collecting sand samples, logging the hole, setting the casing, grouting the well, setting the screen, placing the filter pack, developing and testing the well, and installing the pump.</p> <p>(NOTE: A person who owns or leases property in the state; or who otherwise owns a property interest allowing the drilling of a water well on, and the use of water under, property in the state may drill a water well on that property without having a Water Well Contractor's license provided:</p> <ul style="list-style-type: none"> <li>- the well will be used only to supply water for domestic use to a single family dwelling which is the owner's or lessee's permanent residence; and/or to water livestock on the owner's or lessee's farm</li> <li>- the owner or lessee complies with applicable well construction standards contained in this regulation and the applicable regulations promulgated by the Mississippi State Department of Health.)</li> </ul>

<b>COMPLIANCE CATEGORY:</b> <b>WATER QUALITY MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>WQ.90.2.MS.</b> Abandoned water wells must be properly decommissioned (MDEQ, Office of Land and Water Resources, LW-2, Section IV (G) and LW-3, XIII [Added June 1998; Revised May 2005; Citation Revised May 2006; Revised March 2007].</p>	<p>(NOTE: These requirements are repeated in WQ.100.2.MS.)</p> <p>(NOTE: The standards for decommissioning abandoned or unused water wells and boreholes apply to all abandoned water wells and to all boreholes that penetrate water bearing strata or are greater than 25 feet in depth including potable water wells, agricultural wells, monitoring wells, observation wells, dewatering wells, relief wells, saline or brackish water withdrawal wells, contaminant recovery wells, heat pump water supply wells and closed-loop system holes, industrial supply wells, rig supply wells, geotechnical boreholes, cathodic protection wells and pilot boreholes.)</p> <p>Verify that all wells and boreholes that penetrate water bearing stratum with a depth of 25 feet, or greater, below land surface are properly be decommissioned by a water well contractor licensed by MDEQ.</p> <p>(NOTE: Wells less than 1 less than 25 feet in depth below land surface may be plugged by someone other than a licensed water well contractor. However, the same procedures and reporting requirements apply regardless of well size or of who plugs the well.)</p> <p>(NOTE: If approved and accepted in writing by MDEQ, properly cased and sealed wells may be provided with a locking cover capable of preventing the entrance of contaminants and used as monitoring wells or observation wells in lieu of abandonment. If the use of an observation or monitoring well is later discontinued by MDEQ, the landowner/permittee is responsible for properly decommissioning the well.)</p> <p>(NOTE: A water well is considered abandoned if its use has been permanently discontinued:</p> <ul style="list-style-type: none"> <li>- if the well has not been used in the preceding 12 months (except for established rotations of pumping equipment between wells related to crop irrigation)</li> <li>- if the pumping equipment has been removed (except for established rotations of pumping equipment between wells related to crop irrigation)</li> <li>- if the well cannot be repaired.)</li> </ul> <p>Verify that water wells are plugged within 180 days after abandonment or cessation of use.</p> <p>Verify that the person or contractor who plugs an abandoned water well or borehole submits the decommissioning form to MDEQ within 30 days after completion of the plugging.</p> <p>(NOTE: Reporting the abandonment and plugging of multiple water wells and/or boreholes on one form may be permissible, with prior approval from MDEQ,</p>

<b>COMPLIANCE CATEGORY:</b> <b>WATER QUALITY MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>WQ.90.3.MS.</b> [Deleted May 2005].</p> <p><b>WQ.90.4.MS.</b> Reports must be filed with MDEQ within 30 days of the well drilling completion date (MDEQ, Office of Land and Water Resources, LW-2, Section IV(E)) [Added May 2006; Citation Revised March 2009].</p> <p><b>WQ.90.5.MS.</b> Replacement wells must meet specific qualifications (MDEQ, Office of Land and Water Resources, LW-2, Section IV(F)) [Added May 2006; Citation Revised March 2009].</p>	<p>provided the same decommissioning procedure was used and the location of each water well and/or borehole is clearly identified.)</p> <p>(NOTE: <i>Surface Water and Ground Water Use and Protection Regulations</i>, Chapter 4, repealed and replaced.)</p> <p>(NOTE: These requirements are repeated in WQ.100.4.MS.)</p> <p>Verify that within 30 days of the drilling completion date, data collected and/or received on the well is filed with MDEQ by the water well contractor.</p> <p>Verify that the data includes, but is not limited to, the following:</p> <ul style="list-style-type: none"> <li>- any data that differs from the issued permit (i.e. depth, casing diameter, etc)</li> <li>- copies of all borehole geophysical log(s)</li> <li>- driller's log</li> <li>- drill cuttings (if available)</li> <li>- pump test information (if available)</li> <li>- analysis of water (if available).</li> </ul> <p>(NOTE: If the well is not developed and completed immediately upon completion of drilling, the pump test information and water analysis is submitted by the owner or by the contractor who subsequently completes the well within 30 days of receipt of final report.)</p> <p>Verify that, if required by the Commission, owners and operators of all water wells, that produce in excess of 20,000 gallons per day may be required to file an annual report on the volume of groundwater withdrawn each calendar year prior to March 30.</p> <p>(NOTE: These requirements are repeated in WQ.100.5.MS.)</p> <p>(NOTE: Construction of a qualifying replacement well does not require prior approval from the Permit Board . A replacement well may be drilled to replace a properly authorized well that has become unusable.)</p> <p>Verify that a replacement well meets the following qualifications:</p> <ul style="list-style-type: none"> <li>- replaces a well that will be properly plugged and abandoned within 180 days of completion of the replacement well</li> <li>- withdraws water from the same water-bearing formation as the old well</li> <li>- supplies water for the same beneficial use as the old well</li> </ul>

<b>COMPLIANCE CATEGORY:</b> <b>WATER QUALITY MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>WQ.90.6.MS.</b> [Deleted March 2007].</p> <p><b>WQ.90.7.MS.</b> Control devices that are capable of stopping the waste of water are required on all wells that have a natural free-flowing condition above the ground surface (MDEQ, Office of Land and Water Resources, LW-2, Section IV(H)) [Added May 2006; Citation Revised March 2009].</p>	<p>- is located within a 250-foot radius of the old well.</p> <p>(NOTE: Replacement wells for irrigation, aquaculture, or wildlife enhancement do not need to be located within a 250-foot radius of the old well provided the water will be applied to the same field or pond served by the original well.)</p> <p>Verify that the owner of the well to be abandoned provides MDEQ written notification of the replacement within 5 calendar days after initiating construction of the replacement well.</p> <p>Verify that the well being replaced is properly being decommissioned in accordance with paragraph IV.G. of this regulation no later than 180 days from the date the replacement well is completed.</p> <p>(NOTE: MDEQ, Office of Land and Water Resources, LW-1, Section IV(G) requirements are incorporated in WQ.90.2.MS.)</p> <p>(NOTE: These requirements are repeated in WQ.100.7.MS.)</p> <p>Verify that all wells that have a natural free-flowing condition above the ground surface have control devices capable of stopping the waste of water, except for relief wells installed to protect the integrity of a structure.</p> <p>(NOTE: MDEQ, upon receiving information about a free-flowing well, will send the landowner a written directive to install a control device on the well within a specified time limit and to operate the device in such a manner as to prevent waste of the water.)</p> <p>Verify that the landowner provides MDEQ written notification when the control device has been installed and the waste of water has ceased.</p>

<b>COMPLIANCE CATEGORY:</b> <b>WATER QUALITY MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>WQ.100.</b></p> <p><b>MISCELLANEOUS WELLS</b></p> <p><b>WQ.100.1.MS.</b> Water wells must be permitted and well drillers must be licensed (MDEQ, Office of Land and Water Resources LW-2, II (C) and LW-3, II) [Added June 1998; Revised May 2004; Revised May 2005; Citation Revised May 2006].</p>	<p>(NOTE: These requirements are repeated in WQ.90.1.MS. and permitting requirements are repeated in WQ.120.1.MS.)</p> <p>Verify that groundwater withdrawal wells are permitted before use of groundwater from the well begins.</p> <p>(NOTE: Wells for the purpose of groundwater withdrawal meeting the following conditions are not subject to the permitting requirements:</p> <ul style="list-style-type: none"> <li>- wells used for domestic purposes and providing potable water to only 1 household</li> <li>- wells with a surface casing diameter less than six inches, except as regulations govern prohibited uses specified in Section IV.D. and reporting requirements specified in Section IV.E</li> <li>- relief wells installed to protect the integrity of a structure, such as a dam or levee.</li> </ul> <p>The fact that a well may be exempt under this regulation does not relieve the owner of responsibility for complying with other applicable state or federal regulations; e.g., wells, regardless of size, that are part of a Public Water System must comply with Mississippi State Department of Health Regulations.)</p> <p>Verify that water wells are drilled only by well drillers licensed in the state of Mississippi, or by employees of firms possessing a Mississippi well driller's license.</p> <p>Verify that either a licensed water well contractor or an employee certified by the is on site and personally supervising operations during all critical stages of the drilling and completion of a potable water well including, but not limited to, collecting sand samples, logging the hole, setting the casing, grouting the well, setting the screen, placing the filter pack, developing and testing the well, and installing the pump.</p> <p>(NOTE: A person who owns or leases property in the state; or who otherwise owns a property interest allowing the drilling of a water well on, and the use of water under, property in the state may drill a water well on that property without having a Water Well Contractor's license provided:</p> <ul style="list-style-type: none"> <li>- the well will be used only to supply water for domestic use to a single family dwelling which is the owner's or lessee's permanent residence; and/or to water livestock on the owner's or lessee's farm</li> <li>- the owner or lessee complies with applicable well construction standards contained in this regulation and the applicable regulations promulgated by the Mississippi State Department of Health.)</li> </ul>

<b>COMPLIANCE CATEGORY:</b> <b>WATER QUALITY MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>WQ.100.2.MS.</b> Abandoned water wells must be properly decommissioned (MDEQ, Office of Land and Water Resources, LW-2, Section IV (G) and LW-3, XIII [Added June 1998; Revised May 2005; Citation Revised May 2006; Revised March 2007].</p>	<p>(NOTE: These requirements are repeated in WQ.90.2.MS.)</p> <p>(NOTE: The standards for decommissioning abandoned or unused water wells and boreholes apply to all abandoned water wells and to all boreholes that penetrate water bearing strata or are greater than 25 feet in depth including potable water wells, agricultural wells, monitoring wells, observation wells, dewatering wells, relief wells, saline or brackish water withdrawal wells, contaminant recovery wells, heat pump water supply wells and closed-loop system holes, industrial supply wells, rig supply wells, geotechnical boreholes, cathodic protection wells and pilot boreholes.)</p> <p>Verify that all wells and boreholes that penetrate water bearing stratum with a depth of 25 feet, or greater, below land surface are properly be decommissioned by a water well contractor licensed by MDEQ.</p> <p>(NOTE: Wells less than 1 less than 25 feet in depth below land surface may be plugged by someone other than a licensed water well contractor. However, the same procedures and reporting requirements apply regardless of well size or of who plugs the well.)</p> <p>(NOTE: If approved and accepted in writing by MDEQ, properly cased and sealed wells may be provided with a locking cover capable of preventing the entrance of contaminants and used as monitoring wells or observation wells in lieu of abandonment. If the use of an observation or monitoring well is later discontinued by MDEQ, the landowner/permittee is responsible for properly decommissioning the well.)</p> <p>(NOTE: A water well is considered abandoned if its use has been permanently discontinued:</p> <ul style="list-style-type: none"> <li>- if the well has not been used in the preceding 12 months (except for established rotations of pumping equipment between wells related to crop irrigation)</li> <li>- if the pumping equipment has been removed (except for established rotations of pumping equipment between wells related to crop irrigation)</li> <li>- if the well cannot be repaired.)</li> </ul> <p>Verify that water wells are plugged within 180 days after abandonment or cessation of use.</p> <p>Verify that the person or contractor who plugs an abandoned water well or borehole submits the decommissioning form to MDEQ within 30 days after completion of the plugging.</p> <p>(NOTE: Reporting the abandonment and plugging of multiple water wells and/or boreholes on one form may be permissible, with prior approval from MDEQ,</p>

<b>COMPLIANCE CATEGORY: WATER QUALITY MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p><b>WQ.100.3.MS.</b> [Deleted May 2005].</p> <p><b>WQ.100.4.MS.</b> Reports must be filed with MDEQ within 30 days of the well drilling completion date (MDEQ, Office of Land and Water Resources, LW-2, Section IV(E)) [Added May 2006; Citation Revised March 2009].</p> <p><b>WQ.100.5.MS.</b> Replacement wells must meet specific requirements (MDEQ, Office of Land and Water Resources, LW-2, Section IV (F)) [Added May 2006; Citation Revised March 2009].</p>	<p>provided the same decommissioning procedure was used and the location of each water well and/or borehole is clearly identified.)</p> <p>(NOTE: <i>Surface Water and Ground Water Use and Protection Regulations</i>, Chapter 4, repealed and replaced.)</p> <p>(NOTE: These requirements are repeated in WQ.90.4.MS.)</p> <p>Verify that within 30 days of the drilling completion date, data collected and/or received on the well is filed with MDEQ by the water well contractor.</p> <p>Verify that the data includes, but is not limited to, the following:</p> <ul style="list-style-type: none"> <li>- any data that differs from the issued permit (i.e. depth, casing diameter, etc)</li> <li>- copies of all borehole geophysical log(s)</li> <li>- driller's log</li> <li>- drill cuttings (if available)</li> <li>- pump test information (if available)</li> <li>- analysis of water (if available).</li> </ul> <p>(NOTE: If the well is not developed and completed immediately upon completion of drilling, the pump test information and water analysis is submitted by the owner or by the contractor who subsequently completes the well within 30 days of receipt of final report.)</p> <p>Verify that, if required by the Commission, owners and operators of all water wells, that produce in excess of 20,000 gallons per day may be required to file an annual report on the volume of groundwater withdrawn each calendar year prior to March 30.</p> <p>(NOTE: These requirements are repeated in WQ.90.5.MS.)</p> <p>(NOTE: Construction of a qualifying replacement well does not require prior approval from the Permit Board. A replacement well may be drilled to replace a properly authorized well that has become unusable.)</p> <p>Verify that a replacement well meets the following qualifications:</p> <ul style="list-style-type: none"> <li>- replaces a well that will be properly plugged and abandoned within 180 days of completion of the replacement well</li> <li>- withdraws water from the same water-bearing formation as the old well</li> <li>- supplies water for the same beneficial use as the old well</li> </ul>

<b>COMPLIANCE CATEGORY:</b> <b>WATER QUALITY MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>WQ.100.6.MS.</b> [Deleted March 2007].</p> <p><b>WQ.100.7.MS.</b> Control devices that are capable of stopping the waste of water are required on all wells that have a natural free-flowing condition above the ground surface (MDEQ, Office of Land and Water Resources, LW-2, Section IV(H)) [Added May 2006; Citation Revised March 2009].</p>	<p>- is located within a 250-foot radius of the old well.</p> <p>(NOTE: Replacement wells for irrigation, aquaculture, or wildlife enhancement do not need to be located within a 250-foot radius of the old well provided the water will be applied to the same field or pond served by the original well.)</p> <p>Verify that the owner of the well to be abandoned provides MDEQ written notification of the replacement within 5 calendar days after initiating construction of the replacement well.</p> <p>Verify that the well being replaced is properly being decommissioned (see WQ.100.6.MS.) no later than 180 days from the date the replacement well is completed.</p> <p>(NOTE: MDEQ, Office of Land and Water Resources, LW-1, Section IV(G) requirements are incorporated in WQ.90.2.MS.)</p> <p>(NOTE: These requirements are repeated in WQ.90.7.MS.)</p> <p>Verify that all wells that have a natural free-flowing condition above the ground surface have control devices capable of stopping the waste of water, except for relief wells installed to protect the integrity of a structure.</p> <p>(NOTE: MDEQ, upon receiving information about a free-flowing well, will send the landowner a written directive to install a control device on the well within a specified time limit and to operate the device in such a manner as to prevent waste of the water.)</p> <p>Verify that the landowner provides MDEQ written notification when the control device has been installed and the waste of water has ceased.</p>



<b>COMPLIANCE CATEGORY:</b> <b>WATER QUALITY MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>UNDERGROUND INJECTION CONTROL (UIC)</b></p> <p><b>WQ.109</b> <b>All Wells</b></p> <p><b>WQ.109.1.MS.</b> Underground injection programs must have a valid UIC permit (MDEQ, Wastewater Discharge Permit Regulations for National Pollutant Discharge Elimination System (NPDES), UIC, and State Operating Permits, WPC-1, Chapter One, Section II (B) and Section IV (K)) [Citation Revised July 1997; Citation Revised March 2009].</p> <p><b>WQ.109.2.MS.</b> Dischargers must meet the terms and conditions of the UIC permit (MDEQ, Wastewater Discharge Permit Regulations for National Pollutant Discharge Elimination System (NPDES), UIC, and State Operating Permits, WPC-1, Chapter One, Section IV (A) (13), (18), and (19)) [Citation Revised July 1997; Citation Revised March 2009].</p>	<p>Determine whether any of the following criteria are met for discharges that are exempt from UIC permit requirements:</p> <ul style="list-style-type: none"> <li>- human sewage discharge from vessels</li> <li>- water, gas, or other materials injected into a well to facilitate the production of oil or gas</li> <li>- waste or other fluids authorized for injection into a Class V well</li> <li>- storm sewers exempted under 40 Code of Federal Regulations (CFR) 122.26 and not connected to a wastewater treatment works</li> <li>- pollutants introduced from non point-source agricultural and silvicultural activities.</li> </ul> <p>Verify that facilities discharging non-exempt wastes or other fluids into underground waters of the state through the use of an injection well, have a UIC permit.</p> <p>Verify that the discharger files an application at least 180 days before the commencement of a discharge that would require a UIC permit.</p> <p>(NOTE: Moved from WQ.110.1. May 2004)</p> <p>Verify that the discharge authorized by the permit is consistent with the terms and conditions of that permit.</p> <p>Verify that the discharger keeps the facility in good working order and operates, as efficiently as possible, any facilities or systems of control installed to achieve compliance with the discharge permit.</p> <p>Verify that the discharger takes all reasonable steps to minimize or prevent any discharge in violation of the permit that is likely to have a detrimental effect on human health or the environment.</p> <p>(NOTE: Moved from WQ.110.2. May 2004)</p>

<b>COMPLIANCE CATEGORY:</b> <b>WATER QUALITY MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>WQ.109.3.MS.</b> UIC permit holders must meet specific requirements for reporting discharges (MDEQ, Wastewater Discharge Permit Regulations for National Pollutant Discharge Elimination System (NPDES), UIC, and State Operating Permits, Chapter One, Section IV (A) (10), (14), and (15)) [Citation Revised July 1997].</p>	<p>Verify that the UIC permit holder provides the Permit Board with written notice of compliance or noncompliance within 14 days after the compliance date set by the Board.</p> <p>Verify that any facility expansion, production increase, process modification, or change in discharge volume is reported to the Permit Board.</p> <p>Verify that UIC permit holders with POTWs notify the Board of any of the following activities:</p> <ul style="list-style-type: none"> <li>- the production of any new waste or wastewater constituents into the treatment works which would be considered a new source</li> <li>- any introduction of waste constituents into the treatment works which would be subject to Federal regulation</li> <li>- any substantial change in volume or character of waste constituents being introduced into the treatment works by a source discharging into the treatment works at the time of issuance of a permit.</li> </ul> <p>(NOTE: Moved from WQ.110.3. May 2004)</p>
<p><b>WQ.109.4.MS.</b> UIC permit holders must meet specific requirements for monitoring and compliance reporting (MDEQ, Wastewater Discharge Permit Regulations for National Pollutant Discharge Elimination System (NPDES), UIC, and State Operating Permits, Chapter One, Section IV(A) (9),(28), and (29)).</p>	<p>Verify that the UIC permit holder keeps a copy of the written notice of compliance or noncompliance a minimum of 3 yr.</p> <p>Verify that the UIC permit holder reports the results of all required monitoring activities to the Board at least once a year.</p> <p>Verify that the UIC permit holder reports to the Board within 24 h of becoming aware of any instances of noncompliance.</p> <p>Verify that the oral report to the Board is followed by a written report within 5 days and contains the following information:</p> <ul style="list-style-type: none"> <li>- a description of the noncompliance and its cause if known</li> <li>- the period of noncompliance including exact dates or if not corrected the anticipated time the noncompliance is expected to continue</li> <li>- the steps taken to reduce, eliminate and prevent the recurrence of the noncomplying discharge.</li> </ul> <p>(NOTE: Moved from WQ.110.4. May 2004)</p>

<p align="center"><b>COMPLIANCE CATEGORY:</b>  <b>WATER QUALITY MANAGEMENT</b>  <b>Mississippi Supplement</b></p>	
<p align="center"><b>REGULATORY REQUIREMENTS:</b></p>	<p align="center"><b>REVIEWER CHECKS:</b>  <b>March 2010</b></p>
<p><b>UNDERGROUND INJECTION CONTROL (UIC)</b></p> <p><b>WQ.110</b>  <b>Class I Wells</b></p> <p><b>WQ.110.1.MS.</b> [Moved May 2004].</p> <p><b>WQ.110.2.MS.</b> [Moved May 2004].</p> <p><b>WQ.110.3.MS.</b> [Moved May 2004].</p> <p><b>WQ.110.4.MS.</b> [Moved May 2004].</p>	<p>(NOTE: Moved to WQ.109.1. May, 2004)</p> <p>(NOTE: Moved to WQ.109.2. May, 2004)</p> <p>(NOTE: Moved to WQ.109.3. May, 2004)</p> <p>(NOTE: Moved to WQ.109.4. May, 2004)</p>

<b>COMPLIANCE CATEGORY:</b> <b>WATER QUALITY MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>WQ.115.</b></p> <p><b>WATER QUALITY STANDARDS</b></p> <p><b>WQ.115.1.MS.</b> Facilities must meet general water quality criteria (MDEQ, <i>Water Quality Criteria for Intrastate, Interstate and Coastal Waters</i>, WPC-2, Section II(1) through (10)) [Revised July 1997; Revised March 2007].</p>	<p>(NOTE: Under certain conditions the Commissioner may allow exceptions to the limits for water quality.)</p> <p>Verify that waters of the state are free from the following:</p> <ul style="list-style-type: none"> <li>- floating debris, oil, and scum, or other substances attributable to municipal, industrial, or agricultural discharges in amounts sufficient to be unsightly or deleterious</li> <li>- substances that produce color, odor, total suspended solids, or other conditions in such a degree as to create a nuisance or render water injurious to public health, recreation, or aquatic life</li> <li>- substance in concentration or combinations that are toxic or harmful to humans, animals, or aquatic life.</li> </ul> <p>Verify that the dissolved oxygen concentrations in waters of the state are maintained at a daily average not less than 5.0 mg/L with an instantaneous minimum of not less than 4.0 mg/L.</p> <p>Verify that the pH levels in waters of the state are maintained between 6.0 and 9.0 with a variance of no more than one pH unit.</p> <p>Verify that the following temperatures standards are met in waters of the state:</p> <ul style="list-style-type: none"> <li>- the maximum temperature rise above natural temperatures does not exceed 5 Degrees F in streams, lakes, and reservoirs</li> <li>- the maximum water temperature does not exceed 90 Degrees F, except that the Tennessee River does not exceed 86 Degrees F</li> <li>- no withdrawals from or discharge of heated waters to the hypolimnion unless it can be shown that such discharge will improve water quality</li> <li>- the normal daily and seasonal temperature variations that were present before the addition of artificial heat are maintained</li> <li>- no thermal block to the migration of aquatic organisms is created.</li> </ul> <p>Verify that the levels of toxic substances in waters of the state do not result in chronic or acute toxicity or impairment to the uses of the water by aquatic life (see Appendix 13-1 for specific standards).</p> <p>Verify that municipal wastes, industrial wastes, or other wastes receive effective treatment or control in accordance with the Federal Clean Water Act.</p> <p>(NOTE: The state may set levels that are site specific for exposure routes of fish</p>

<b>COMPLIANCE CATEGORY:</b> <b>WATER QUALITY MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>WQ.115.2.MS.</b> [Deleted March 2007].</p> <p><b>WQ.115.3.MS.</b> Facilities that discharge into water classified as source water for public water supplies must meet specific water quality standards (MDEQ, <i>Water Quality Criteria for Intrastate, Interstate and Coastal Waters</i>, WPC-2, Section III(1)) [Added June 1998; Revised May 2006; Revised March 2007].</p> <p><b>WQ.115.4.MS.</b> Facilities that discharge into water classified</p>	<p>and shellfish tissue consumption.)</p> <p>(NOTE: This checklist item moved here from WA.5.2.MS., June 1998.)</p> <p>(NOTE: Appendix 13-3 lists waters classified as sources of raw water for public water supplies.)</p> <p>Verify that the discharge meets the following water quality criteria:</p> <ul style="list-style-type: none"> <li>- for May through October, fecal coliform does not exceed a geometric mean of 200/100 mL sample</li> <li>- no more than 10 percent of the samples examined during any month exceed 400 fecal coliform/100 mL sample</li> <li>- for the months of November through April (when incidental recreational contact is not likely) fecal coliforms does not exceed 2000/100 mL as a geometric mean (either most probable number (MPN) or membrane filtration (MF) count) based on at least five samples taken over a 30-day period</li> <li>- for the months of November through April (when incidental recreational contact is not likely) fecal coliforms does not exceed a maximum of 4000/100 mL in any one sample</li> <li>- water chloride levels do not exceed 230 mg/L</li> <li>- dissolved solids do not exceed 500 mg/L</li> <li>- specific conductance does not exceed 500 micromhos/cm</li> <li>- the daily average threshold odor number does not exceed 24 at 60 Degrees C</li> <li>- the gross beta activity (in the known absence of Strontium-90 and alpha emitters) does not exceed 1000 picocuries per liter at any time.</li> <li>- the following concentrations (dissolved) are not exceeded at any time: <ul style="list-style-type: none"> <li>- barium: 2.0 mg/L</li> <li>- fluoride: 2.0 mg/L</li> <li>- lead: 0.015 mg/L</li> <li>- nitrate (as N): 10.0 mg/L.</li> </ul> </li> </ul> <p>Verify that water on the facility does not exceed any chemical concentrations listed in Appendix 13-4 at any time.</p> <p>(NOTE: This checklist item moved here from WA.5.3.MS., June 1998.)</p>

<b>COMPLIANCE CATEGORY: WATER QUALITY MANAGEMENT Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS: March 2010</b>
<p>as shellfish harvesting waters must meet specific water quality standards (MDEQ, <i>Water Quality Criteria for Intrastate, Interstate and Coastal Waters</i>, WPC-2, Section III (2)) [Added June 1998].</p> <p><b>WQ.115.5.MS.</b> Facilities that discharge into water classified as recreational waters must meet specific water quality standards (MDEQ, <i>Water Quality Criteria for Intrastate, Interstate and Coastal Waters</i>, WPC-2, Section III (3)) [Added June 1998].</p> <p><b>WQ.115.6.MS.</b> Facilities that discharge into water classified as suitable for fish and wildlife must meet specific water quality standards (MDEQ, <i>Water Quality Criteria for Intrastate, Interstate and Coastal Waters</i>, WPC-2, Section III (4)) [Added June 1998].</p>	<p>(NOTE: Appendix 13-5 lists waters that are classified as shellfish harvesting waters.)</p> <p>Verify that discharges into water that is classified as shellfish harvesting waters meet the following water quality criteria:</p> <ul style="list-style-type: none"> <li>- the medium coliform MPN of the water does not exceed 14/100 mL</li> <li>- not more than 10 percent of the samples ordinarily exceed MPN of 43/100 mL, in areas most likely to be exposed to fecal contamination during most unfavorable hydrographic and pollution conditions.</li> </ul> <p>(NOTE: This checklist item moved here from WA.5.4.MS., June 1998.)</p> <p>(NOTE: Appendix 13-6 lists waters of the state that are classified as recreational waters.)</p> <p>Verify that discharges into recreational waters meet the following criteria:</p> <ul style="list-style-type: none"> <li>- fecal coliforms do not exceed a geometric mean of 200/100 mL and no more than 10 percent of the samples examined during any month can exceed 400/100 mL</li> <li>- specific conductance does not exceed 1000 micromhos/cm for fresh water streams</li> <li>- dissolved solids do not exceed 750 mg/L for a monthly average and 1500 mg/L at any time for fresh water streams.</li> </ul> <p>(NOTE: This checklist item moved here from WA.5.5.MS., June 1998.)</p> <p>Verify that discharges into waters classified as suitable for fish and wildlife meet the following criteria:</p> <ul style="list-style-type: none"> <li>- during the months of May through October, fecal coliform does not exceed a geometric mean of 200 per 100 mL and no more than 10 percent of the samples examined during any of these months exceeds 400 per 100 mL</li> <li>- during the months of November through April, fecal coliform does not exceed a geometric mean of 2000/100 mL and no more than 10 percent of the samples examined during any of these months exceeds 4000/100 mL</li> <li>- specific conductance does not exceed 1000 micromhos/cm for fresh water streams</li> <li>- dissolved solids do not exceed 750 mg/L for a monthly average and 1500 mg/L at any time for fresh water streams</li> <li>- phenolic compounds do not exceed 0.30 mg/L.</li> </ul>

<b>COMPLIANCE CATEGORY:</b> <b>WATER QUALITY MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>WQ.115.7.MS.</b> Facilities that discharge into water classified as ephemeral stream waters must meet specific water quality standards (MDEQ, <i>Water Quality Criteria for Intrastate, Interstate and Coastal Waters</i>, WPC-2, Section III (5)) [Added June 1998].</p>	<p>(NOTE: This checklist item moved here from WA.5.6.MS., June 1998.)</p> <p>Verify that discharges into waters classified as ephemeral stream waters meet the following water quality criteria:</p> <ul style="list-style-type: none"> <li>- the water is free of foreign substances and toxic or harmful wastes</li> <li>- dissolved oxygen is maintained at an appropriate level to avoid nuisance conditions.</li> </ul>

<b>COMPLIANCE CATEGORY:</b> <b>WATER QUALITY MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p><b>WQ.120.</b></p> <p><b>WATER USE PERMITS</b></p> <p><b>WQ.120.1.MS.</b> The use of groundwater or surface water must be permitted (MDEQ, <i>Office of Land and Water Resources</i>, LW-2, II (C), II(F), III(A) and IV(A) and LW-2, II(C) and III(A)) [Citation Revised July 1997; Revised May 2005; Revised May 2006; Citation Revised March 2009].</p>	<p>Verify that no person initiates the use of groundwater or surface water, or commences the construction of a surface water impoundment until an appropriate groundwater or surface water use permit, or a surface water permit for storage or use of water from an impoundment has been issued by the Permit Board, or its designee.</p> <p>Verify that the landowner/permittee provides MDEQ a written request for modification for proposed changes or written notification of any proposed change in permit parameters.</p> <p>(NOTE: A permit may be modified for any of the following reasons:</p> <ul style="list-style-type: none"> <li>- any change in the beneficial use of, and/or the volume of, water withdrawn from a well or diverted from a surface water body</li> <li>- any change in location of a surface water diversion point</li> <li>- any change in permit parameters requested by the landowner/permittee such as change of ownership, change of permittee, or change of mailing address</li> <li>- any change in permit conditions</li> <li>- any substantive errors in a permit that must be corrected</li> <li>- legislative action or judicial decision.)</li> </ul> <p>(NOTE: Surface water diversions meeting the following conditions are not subject to the permitting requirements:</p> <ul style="list-style-type: none"> <li>- diversions when the water is to be used for domestic single-residence purposes</li> <li>- diversions from an existing impoundment not located on a continuous, free flowing watercourse.)</li> </ul> <p>(NOTE: Wells for the purpose of groundwater withdrawal meeting the following conditions are not subject to the permitting requirements of this regulation:</p> <ul style="list-style-type: none"> <li>- wells used for domestic purposes and providing potable water to only 1 household</li> <li>- wells with a surface casing diameter less than six inches</li> <li>- relief wells installed to protect the integrity of a structure, such as a dam or levee</li> </ul> <p>The fact that a well may be exempt under this regulation does not relieve the owner of responsibility for complying with other applicable state or federal regulations; e.g., wells, regardless of size, that are part of a Public Water System must comply with Mississippi State Department of Health Regulations.)</p>
<p><b>WQ.120.2.MS.</b> Groundwater</p>	<p>Verify that the use of groundwater to maintain the water level of, or to</p>



<b>COMPLIANCE CATEGORY:</b> <b>WATER QUALITY MANAGEMENT</b> <b>Mississippi Supplement</b>	
<b>REGULATORY REQUIREMENTS:</b>	<b>REVIEWER CHECKS:</b> <b>March 2010</b>
<p>or surface water use must be limited to beneficial uses (MDEQ, <i>Office of Land and Water Resources</i>, LW-2, IV(D) and LW-2, II(C), and III(A)) [Added May 2006; Citation Revised March 2009].</p>	<p>continually or continuously refill, a surface water impoundment for aesthetic purposes does not occur, regardless of the size of the well or the source of the groundwater.</p> <p>(NOTE: Groundwater may be used to augment or to replace surface water diverted from an impoundment for a beneficial use, with prior approval of the Permit Board.)</p> <p>Verify that the use of more than 20,000 gallons per day of groundwater for once-through, non-contact cooling purposes does not occur, regardless of the size of the well or the source of the groundwater.</p> <p>(NOTE: Proposals to use less than 20,000 gpd will be considered on a case-by-case basis.)</p> <p>Verify that continuous uncontrolled discharge of groundwater from free-flowing wells does not occur, regardless of the size of the well or the source of the groundwater.</p> <p>(NOTE: The Permit Board may, after affording an opportunity for hearing to interested parties, determine that other wasteful discharges/withdrawals of groundwater are not beneficial uses, constitute waste, and are prohibited to protect the public interest.)</p>

### Appendix 13-1

#### Acute and Chronic Toxicity Values For All Waters (micrograms/L)

(Source: Water Quality Criteria for Intrastate, Interstate and Coastal Waters, WPC-2, Appendix A)  
[Revised July 1997]

Parameter*	Freshwater		Saltwater	
	Acute	Chronic	Acute	Chronic
Aldrin	3.0		1.3	
Arsenic (III)	360	190	69	36
Arsenic, Total				
Cadmium	1.74+	0.62+	43	9.3
Chlordane	2.4	0.0043	0.09	0.004
Chlorine	19	11	13	7.5
Chromium (Hex)	15.7	10.6	1100	50
Chromium (III)	311+	101+		
Copper	8.85+	6.28+	2.4	2.4
Cyanide	22.0	5.2	1.0	1.0
4,4 DDT	1.1	0.001	0.13	0.001
Dieldrin	2.5	0.0019	0.71	0.0019
Endosulfan	0.22	0.056	0.034	0.0087
Endrin	0.18	0.0023	0.037	0.0023
Heptachlor	0.52	0.0038	0.053	0.0036
Lindane	2.0	0.08	0.16	
Lead	30+	1.18+	210	8.1
Mercury (II)	2.1	0.012	1.8	0.025
Mercury, Total				
Nickel	787+	87+	75	8.3
Phenol	300	102	300	58
Pentachlorophenol	3.32	2.1	13	7.9
PCB 1242	0.2	0.014	1.0	0.03
PCB 1254	0.2	0.014	1.0	0.03
PCB 1221	0.2	0.014	1.0	0.03
PCB 1232	0.2	0.014	1.0	0.03
PCB 1248	0.2	0.014	1.0	0.03
PCB 1260	0.2	0.014	1.0	0.03
PCB 1016	0.2	0.014	1.0	0.03
Selenium	20	5.0	300	71
Silver	1.05+		1.9	
Toxaphene	0.73	0.0002	0.21	0.0002
Zinc	63.6+	58.1+	90	81

\*- All parameters are totals except where specifically indicated.

+ - Hardness dependent parameter all criteria are as indicated at hardness less or equal to 50 mg/L as CaCO<sub>3</sub>. If hardness exceeds 50 mg/L as CaCO<sub>3</sub>, then criteria is equal to result of hardness based equations as found in Quality Criteria for water.

## **Appendix 13-2**

[Deleted March 2007]

### **Appendix 13-3**

#### **Bodies of Water Classified as Public Water Supplies**

(Source: Water Quality Criteria for Intrastate, Interstate and Coastal Waters, WPC-2, Section IV)  
[Revised July 1997; Revised March 2007]

Bonita Reservoir in Lauderdale County

Long Creek in Lauderdale County

Flint Creek Reservoir in Stone County (also classified as a recreational area)

Okatibbee Reservoir in Lauderdale County (also Classified as a recreational area)

Barnett Reservoir, from River Bend to the township line between T7N & T8N to Reservoir Dam  
(part of it is also classified as a recreational area)

Pearl River, from the Barnett Reservoir to the City of Jackson Water Intake

Tennessee River, from the Mississippi-Alabama state line to the Mississippi-Tennessee state line

Luxapalila Creek, from the Mississippi-Alabama state line to highway 50

Yellow Creek, from the Mississippi-Alabama state line to the Luxapalila Creek

#### **Appendix 13-4**

[Deleted March 2007]

(NOTE: Water Quality Criteria for Intrastate, Interstate and Coastal Waters, WPC-2, Section III was revised.)

## **Appendix 13-5**

### **Bodies of Water Classified as Shellfish Harvesting Areas**

(Source: Water Quality Criteria for Intrastate, Interstate and Coastal Waters, WPC-2, Section IV)  
[Revised September 1996]

Bangs Lake, from the headwaters to Mississippi Sound  
Bayou Cumbest, from the headwaters to Mississippi Sound  
Biloxi Bay, from the headwaters at U.S. Highway 90 to Mississippi Sound  
Davis Bayou, from the headwaters to Biloxi Bay  
Graveline Bay, from the headwaters to Graveline Bayou  
Graveline Bayou, from Graveline Bay to Mississippi Sound  
Mallini Bayou  
Pass Christian Reef-Henderson Point  
St. Louis Bay in Harrison-Hancock County

## Appendix 13-6

### Bodies of Water Classified as Recreation Waters

(Source: Water Quality Criteria for Intrastate, Interstate and Coastal Waters, WPC-2, Section IV)  
[Revised July 1997]

<b>Flint Creek Reservoir (also classified as a public water supply)</b>	<b>Pearl River (also classified as a public water supply)</b>	<b>Barnett Reservoir (also classified as a public water supply)</b>
Choctaw Lake	Magees Creek	Turkey Fork Reservoir
Davis Lake	Strong River	Beaverdam Creek
Lake Lamar Bruce	Clear Springs Lake	Red Creek
Lake Lowndes	Percy Quinn Lake	Okatoma Creek
Lake Monroe	Homochitto River	Chunky River
Lake Tom Bailey	Bayou Pierre	Chickasawhay River
Oktibbeha County Lake	Little Bayou Pierre	Bowie Creek
Tombigbee State Park Reservoir	East Fork Amite River	Bowie River
Arkabutla Reservoir	West Fork Amite River	Pascagoula River
Chewalla Reservoir	Jourdan River	Chiwapa Reservoir
Enid Reservoir	Mississippi Sound	Bogue Chitto Creek
Grenada Reservoir	Wolf River	Okatibbee Reservoir (also classified as a public water supply)
Lake Dumas	Tuxachanie Creek	Lakeland Park Lake
Lake Washington	Tchoutacabouffa River	Lake Shongela
Moon Lake	Archusa Reservoir	
Sardis Reservoir	Black Creek	
Little Tallahatchie River	Clarke Lake	
Tillatoba Lake	Dry Creek w/s scs lake site #3	
Wall Doxey State Park Reservoir	Simpson County Legion Lake	
Horn Lake	Lake Bogue Homa	
Aberdeen Lake	Lake Claude Bennett	
Lake Columbia	Lake Geiger	
Lake Dixie Springs	Lake Marathon	
Bay Springs Lake	Lake Mike Conner	
Canal Section Pool C	Lake Perry	
Columbus Lake	Lake Ross Barnett	





REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.					
1. REPORT DATE (DD-MM-YYYY) March 2010		2. REPORT TYPE Final		3. DATES COVERED (From - To)	
4. TITLE AND SUBTITLE The Environmental Assessment and Management (TEAM) Guide: Mississippi Supplement				5. FUNDING NUMBERS AEC: MIPR 0010005589 ANG: F9WFEV0028G001 NGB: W45XMA00130245 Commerce: 1301-09-SA00110 Army Reserve: MIPR10CODCD201 USACE: 96x3123 DHS: HAHQDC-09-X-00436 DLA: MIPR SP1001090 USPS: MOA-05-CERL-01 State Department: IAG F3NF369350G002	
6. AUTHOR(S) Carolyn O'Rourke and Patricia A. Kemme					
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army Engineer Research and Development Center (ERDC) Construction Engineering Research Laboratory (CERL) PO Box 9005 Champaign, IL 61826-9005				8. PERFORMING ORGANIZATION REPORT NUMBER ERDC/CERL SR-06-14 Revised March 2010	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)  See the report Preface for a complete list of the sponsors.				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.					
13. SUPPLEMENTARY NOTES Original document prepared by CERL. Copies are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161 or can be downloaded from the HQ AFCEE or CERL (DENIX) bulletin boards. Supersedes USACERL SR-95/50 and all its revisions.					
14. ABSTRACT Environmental assessments help determine compliance with current environmental regulations. The U.S. Air Force, U.S. Army, Defense Logistics Agency (DLA), and Corps of Engineers (Civil Works) have adopted environmental compliance programs that identify compliance problems before they are cited as violations by the U.S. Environmental Protection Agency.  Since 1984, the U.S. Army Construction Engineering Research Laboratory, in cooperation with numerous Department of Defense (DOD) components, has developed environmental compliance assessment checklist manuals. The Environmental Assessment and Management (TEAM) Guide was developed for use by all DOD components. Currently there are five participating DOD components: the Air Force, Air National Guard, Army, Civil Works, and DLA. These agencies have agreed to share the development and maintenance of this Guide.  The Guide combines Code of Federal Regulations and management practices into a series of checklists that show legal requirements and the specific operations or items to review. TEAM Guide is supplemented by DOD component-specific manuals detailing DOD component regulations and policies. The Mississippi Supplement was developed to be used in conjunction with the TEAM Guide, using existing Mississippi state environmental legislation and regulations as well as suggested management practices.					
15. SUBJECT TERMS Environmental Compliance Assessment and Management Program, environmental compliance checklists, The Environmental Assessment and Management (TEAM) Guide, environmental compliance laws and regulations					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT  SAR	18. NUMBER OF PAGES  329	19a. NAME OF RESPONSIBLE PERSON Carolyn O'Rourke
a. REPORT Unclassified	b. ABSTRACT Unclassified	c. THIS PAGE Unclassified			19b. TELEPHONE NUMBER 217-398-5553